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## DOMINION BUREAU OF STATISTICS

Research and Development Division

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# NATIONAL ACCOUNTS INCOME AND EXPENDITURE 1926 - 1956

Published by Authority of
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SUMMINION BUREAU OF STATISTICS



NATIONAL ACCOUNTS DICCOME AND EXPENDITURE

# FOREWORD

The present publication represents a further stage in the improvement and extension of Canada's National Accounts. It consolidates and brings upto-date the work on the annual data which has been carried out since 1951 when the historical series were first published in, National Accounts, Income and Expenditure, 1926-1950. The present report supersedes all previous publications on National Accounts issued by the Dominion Bureau of Statistics.

Three main features distinguish the present report from the earlier reference document:

- (a) Statistical revisions incorporating the results of the 1951 census are included, as well as refinements and improvements in the data which have been made possible by new information and a re-working of many of the series;
- (b) Improvements in presentation and in terminology have been made which it is felt will contribute to clarity and further facilitate the understanding and use of the tables;
- (c) A more detailed discussion of the conceptual framework of the National Accounts now provides a systematic description of the theoretical constructs and definitions used in National Accounting.

The present publication is divided into three parts, preceded by an Introduction which analyzes the main trends and fluctuations in the economy for the period 1926 to 1956. Part I presents the tabular information. It contains the main Gross National Product and Expenditure tables; the constant dollar series which are now shown on a 1949 base; the sector accounts; the industrial distribution which incorporates some changes in classification and is now shown on a gross domestic product at factor cost basis; the geographical distribution of personal income, including a table showing disposable income by provinces; tabular detail underlying the government sector of the National Accounts, with information for each of the three levels of government; a number of miscellaneous tables which provide detail of personal expenditure on goods and services, an analysis of corporation profits, and the "imputed" items which enter the National Accounts; various reconciliation statements which show the adjustments necessary to convert official statistical series published elsewhere to a basis suitable for incorporation in the National Accounts; and finally, tables providing information on population and the labour force.

Part II of the report provides a description of the conceptual framework of the National Accounts, together with a short summary of the development and use of the Accounts as a tool in economic analysis. This section is designed to provide the user with a broad review of the theoretical principles and definitions which underlie the statistical system. Since classification is at the heart of any statistical system, a major aim of the discussion is to make clear the rationale of the classificatory framework on which the Accounts rest.

Part III reviews the statistical sources on which the Accounts draw, and procedures used in making the required estimates. This discussion aims primarily to give the users of the data a general view of the content of the various aggregates and background for appraising the reliability of the estimates.

The present volume was prepared by the Research and Development Division of the Dominion Bureau of Statistics.

In a broad sense, all D.B.S. divisions have contributed to this report; in particular, wages, salaries, and supplementary labour income and most of the price series used in the deflation project are estimated in the Labour and Prices Division, net income of farm operators from farming operations in the Agriculture Division, and exports and imports of goods and services in the International Trade Division; the basic data for many of the estimates are collected and tabulated in the Industry and Merchandising Division and the Public Finance and Transportation Division. The cooperation and assistance of other government agencies, especially the Taxation Division of the Department of National Revenue, the Research Department of the Bank of Canada, the Economic Research Department of the Central Mortgage and Housing Corporation and the Economics Branch of the Department of Trade and Commerce, are also gratefully acknowledged. The estimates of business gross fixed capital formation are derived from a study of Private and Public Investment in Canada, 1926-1951, published by the last-mentioned agency; for later years the figures are derived from the reports Private and Public Investment, Outlook prepared jointly by the Economics Branch of the Department of Trade and Commerce and the General Assignments Division of the D.B.S. The charts were prepared in the Drafting Section of the D.B.S.

WALTER E. DUFFETT,

Dominion Statistician.

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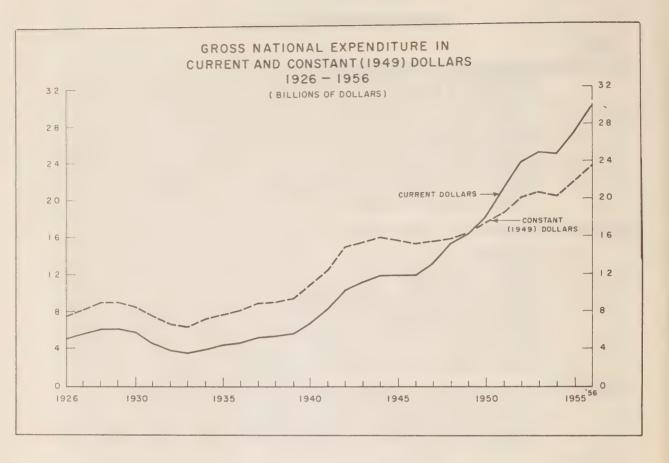
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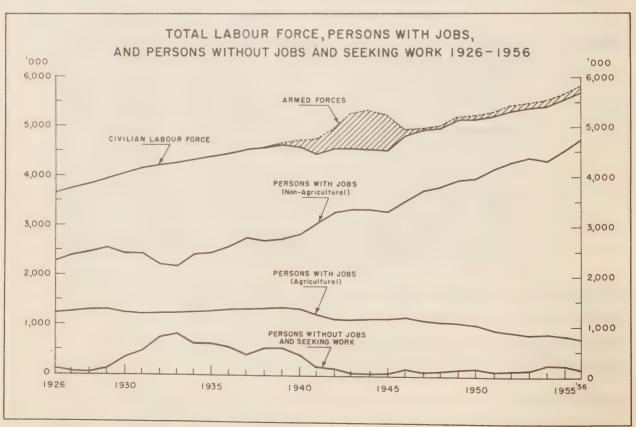
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# NATIONAL ACCOUNTS - INCOME AND EXPENDITURE

1926 - 1956

What stands out in any comparison of the beginning and end of the 30 years covered by this review is the impressive growth of the Canadian economy. But when the years between are considered in sequence, the period is seen as one of major change and dislocation. This span of years covers the prosperous years of the late twenties, the great depression of the early thirties, the subsequent hesitant and incomplete recovery, the mobilization of resources for war and the emergence of a controlled war-time economy, the transition to a peacetime economy operating at high levels with suppressed inflationary pressures becoming increasingly

overt, the upsurge in prices and activity following the outbreak of hostilities in Korea, the mild and short-lived recession following the Korean Armistice, and, finally, the investment boom of the period 1955 to 1956.

The growth in the Canadian economy and the changes in the disposition of the product and in the sources of income that accompanied it are discussed in the first section of this report under the heading "Long Term Trends". The sequence of economic events outlined above is discussed in the second section, "Economic Fluctuations".

#### LONG-TERM TRENDS IN THE ECONOMY

#### Introduction

The period 1926-1956 was one of great growth in the Canadian economy. The population, 9,451 thousand in 1926, numbered 16,081 thousand in 1956, an increase of about 70 per cent. In the same period the growth in the labour force, estimated to be nearly 60 per cent, was significantly lower than the rate of growth of population. Improvements in the technique of production enhanced the effectiveness of effort and made possible increased leisure as well as a much larger volume and variety of goods and services for use at home or for sale abroad.

Gross National Product, measured in constant (1949) dollars, rose from \$7,576 million in 1926 to \$23,542 million in 1956, a threefold increase, and on a per capita basis an increase of slightly more than 80 per cent. This rise in Gross National Product represents an average rate of growth in real output of about 3% per cent a year over the period 1.

The inflationary impetus imparted by the war and persisting throughout most of the post-war period raised the general level of prices nearly 90 per cent between 1926 and 1956. In terms of current dollars, Gross National Product rose from \$5,152 million to \$30,098 million, a near six-fold increase, and per capita Gross National Product rose from \$545 to \$1,872.

# CHANGES IN THE DISPOSITION OF NATIONAL OUTPUT<sup>2</sup>

The growth of Gross National Product was accompanied by shifts in the disposition of output among the various sectors, as well as by changes

in the composition of demand within sectors. The nature of the shift among sectors is set out in the table below, which shows the disposition of national output in current dollars.

#### Percentage Distribution of Gross National Expenditure

	1928	1956
Personal expenditure on consumer goods and services	71.4	62.0
Government expenditure on goods and services	9.3	17.5
Business gross fixed capital formation	16.6	22.1
Value of physical change in inventories	2. 6	2.7
Exports of goods and services	29. 3	21.1
Imports of goods and services	- 29. 9	-25.6
Residual error	.7	. 2
Total	100.0	100.0

The notable changes are the growth in the share of government and of business gross fixed capital formation and the decline in the share of consumers. A substantially smaller proportion of national output went into exports and a smaller proportion of national purchasing was directed toward imports in 1956 than in 1928.

#### The Share of Government

The outstanding shift in the use of the product is the enhanced share of total expenditure absorbed by government. Government expenditure on goods and services accounted for 9.3 per cent of Gross National Expenditure in 1928 and 17½ per cent in 1956. The increase was mainly at the federal level and is to a large extent the result of the enormous expansion in expenditure for defence, which represented 6 per cent of Gross National Expenditure in

1. Average annual rates of growth, compounded

annually.

2. In this and in the following section "Changes in Income Flows" the year 1928 is compared with the year 1956. Both were prosperous years. While 1929 may be thought of as the peak of the boom, it had many unusual features, namely, unusually high expenditures on consumption and investment, a fall in exports accompanied by a rise in imports, a poor crop and a sharp decline in agricultural income.

1956 in contrast to a fraction of 1 per cent in 1928. The share of defence rose sharply after the outbreak of hostilities in Korea in 1950.

Government Expenditure on Goods and Services as a Percentage of Gross National Expenditure

	1928	1956
Federal  Defence Non-Defence  Provincial and Municipal  Provincial  Municipal	2.3 .3 2.0 7.0 2.0 5.0	8. 9 6. 0 2. 9 8. 6 3. 5 5. 1
Government expenditure on goods and services	9.3	17.5

While expenditures for defence are the major element in the upward shift in the government share of the product, government expenditures for other purposes also rose relative to Gross National Product. Federal non-defence expenditures rose from 2 per cent of Gross National Product in 1928 to nearly 3 per cent in 1956 and the corresponding figures for provincial expenditures are 2 per cent and 3½ per cent; expenditures of municipal governments, 5 per cent of Gross National Product in 1956, remained in about the same relationship to Gross National Product as in 1928. These developments

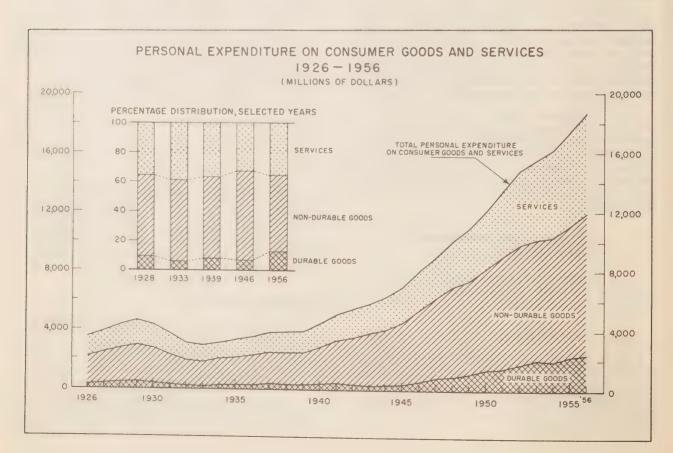
reflect the generally enhanced role of government and in particular the cost of administering the various social security measures introduced during the period.

## The Share of Gross Fixed Capital Formation

In 1956, 22 per cent of national output was devoted to business gross fixed capital formation compared with nearly 17 per cent in 1928. The pattern of expenditure in 1956, when residential construction accounted for 23 per cent of business gross fixed capital formation and non-residential construction and purchases of machinery and equipment each accounted for 38½ per cent, was not substantially different from that of 1928.

#### The Share of the External Sector

The relative importance of the external sector diminished during the period. In spite of the growth and diversification of export capacity, which is a notable development of the post-war period, exports of goods and services accounted for only 21 per cent of total expenditure in 1956, compared with 29 per cent in 1928. Imports of goods and services also declined in relative importance, with about 26 per cent of expenditure being directed toward imports in 1956 compared with 30 per cent in 1928. The reduced share of the external sector reflects the growth of the domestic economy both as a market and as a source of supply.



#### The Share of Consumers

Personal expenditure on consumer goods and services in 1956 amounted to \$18,697 million and accounted for 62 per cent of aggregate expenditure, a significantly smaller proportion than in 1928. Measured in terms of constant (1949) dollars, per capita consumption rose from \$623 in 1928 to \$965 in 1956, an increase of 55 per cent.

The pattern of consumer expenditure was considerably altered over the period. With changes in tastes and higher incomes, consumers devoted a significantly larger proportion of their spending to durables, which accounted for 13 per cent of the total in 1956, compared with 9 per cent in 1928. This shift took place at the expense of purchases of non-durables, which represented 51 per cent of the total in 1956, compared with 55 per cent in 1928. The remaining share, devoted to services, remained about the same.

There were also some distinct shifts in the spending pattern within major categories, as shown in the table below. Among these that may be noted are the relative decline in expenditures for food and clothing and the relative increase in expenditures on tobacco and alcohol, as well as the greatly enhanced importance of automobiles and appliances and radios.

Selected Items of Consumer Expenditure as a Percentage of Total

	1928	1956
Food	26. 4 14. 5 3. 1 2. 4 2. 9 1. 9	24. 1 10. 8 3. 8 2. 7 5. 8 2. 6

There were sharply conflicting trends within the service group. Thus services related to user-operated transportation became more important while purchased transportation declined in relative importance. Expenditure on domestic service rose very little by comparison with total spending.

#### CHANGES IN INCOME FLOWS

#### Changes in Factor Shares

It should be noted that factor shares are identified according to types of earnings and therefore do not represent the shares of different groups of the community in total income. Individuals may have more than one source of income; the wage-earner may receive income in the form of interest or rent; farmers may take off-season employment as wage-earners. For purposes of this analysis, each type of income is included under its appropriate heading. Thus only such income as is earned in farm production appears as the "Accrued Net Income of Farm Operators from Farm Production".

Furthermore, transfer payments, which have a bearing on the distribution of income among various groups of the community, are excluded by definition from National Income since they do not represent payments for services rendered. It should further be noted that the types of earnings identified here may represent earnings of more than one factor of production—for example, net income of unincorporated business measures both the return on capital invested in the business as well as the return on the labour supplied by the proprietor.

Changes in factor shares may reflect a shift in the relative importance of various industries. The typical form of organization varies considerably from industry to industry. The corporate form is characteristic of manufacturing and mining while the unincorporated form is common in services and construction.

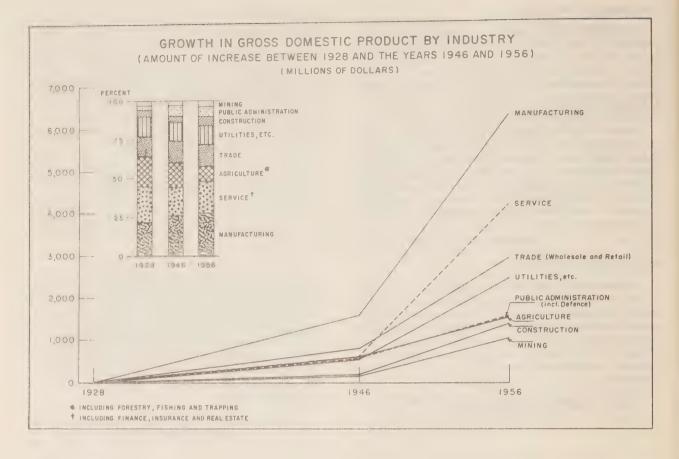
During the period under review, both labour income and corporate profits increased their share of National Income, the former from 57 per cent in 1928 to 64 per cent in 1956, and the latter from 9 per cent in 1928 to 12 per cent in 1956. Concurrently, the share of unincorporated non-farm business declined from 12 per cent in 1928 to 8 per cent in 1956. These shifts reflect the structural developments of the kind mentioned above and possibly also a generally wider adoption of the corporate form of enterprise.

Components of National Income as a Percentage of Total

Percentage of Total		
	1928	1956
Wages, salaries, and supplementary labour income	57. 3 9. 2 7. 6 13. 4 12. 4	63.8 1.8 12.2 8.5 6.4 8.4 - 1.1

The share of rent, interest, and miscellaneous investment income in 1956 was  $8\frac{1}{2}$  per cent, somewhat higher than in 1928. The share of this component remained below its earlier level during most of the war and post-war period. The net imputed rent of owner-occupied dwellings is included under this heading and the large addition to the stock of dwellings and the rise in rents in the post-war period are among the factors tending to restore the share of this component.

The marked decline in the relative importance of the accrued net income of farm operators from farm production reflects the changed position of agriculture in the economy and is therefore discussed in the following section.



# Shifts in the Industrial Origin of the Product

While a comparison of the share of the total product originating in agriculture in any two years may introduce the erratic influence of the weather on crops, it is nonetheless clear that agriculture became a significantly less important source of output during the period considered here. In 1956 agriculture accounted for 7 per cent of Gross Domestic Product, compared with 16½ per cent in 1928.

The decline in the relative importance of agriculture was accompanied by a marked decline in the agricultural labour force, which is estimated to have been 1,305 thousand in 1928 compared with 804 thousand in 1956. Thus about one-third of the labour force was in agriculture in 1928 compared with only 14 per cent in 1956. This decline is associated with the long-term trend toward larger farms, improvements in agricultural technique and the increasing mechanization of farm work, in consequence of which the net output per employed person in agriculture rose very substantially indeed and well in excess of the increase in net output per worker in non-agricultural industries.

Although the decline in the relative importance of agriculture as a source of the product was accompanied by some rise in the relative importance of mining, quarrying and oil wells, and forestry, the

primary industries as a group accounted for only 14 per cent of the product in 1956 in contrast to 22 per cent in 1928.

Gross Domestic Product at Factor Cost by Industry as a Percentage of Total

	1928	1956
Agriculture Forestry Fishing and trapping. Mining, quarrying and oil wells. Manufacturing Construction Transportation, storage, communications and electric power, gas and water utilities Wholesale trade Retail trade Finance, insurance and real estate Public administration and defence Service  Gross Domestic Product at Factor Cost	16. 5 1. 3 . 7 3. 3 22. 3 4. 3 13. 1 3. 6 8. 8 9. 1 3. 4 13. 6	7.3 1.9 .3 4.5 28.0 6.0 11.8 4.5 9.0 9.7 6.4 10.6

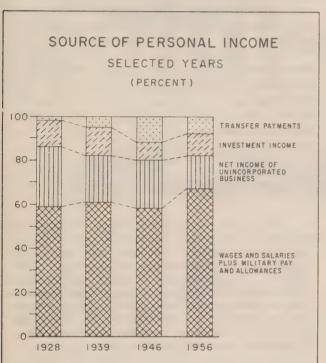
The diminished importance of primary industry had as its counterpart the substantially enhanced contribution of manufacturing industries to the product. Manufacturing industries accounted for 28 per cent of the total in 1956 in contrast to 22 per cent in 1928, indicating the expansion of secondary industry over the period.

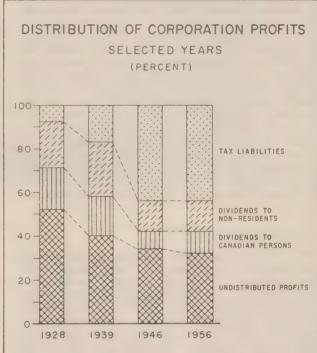
Other industries whose relative importance increased are construction, trade, and finance, insurance and real estate.

Transportation, communication and storage and public utilities declined slightly in relative importance, accounting as a group for 13 per cent of the product in 1928 compared with 12 per cent in 1956. The increasing dependence on user-operated transportation with the growth in the car population and the extension and improvement of highways involved a decline in the importance of purchased transportation.

With the increase in the public service and a much larger defence establishment in 1956 than in 1928, product originating in government rose from 3 per cent in 1928 to 6 per cent in 1956.

The service industries (excluding government) accounted for 14 per cent of the product in 1928 and 11 per cent in 1956. This loss in importance reflects a drastic relative decline in product originating in domestic service, partially offset by expansion in other segments of the service industries.





#### Personal Income

Personal income rose from \$4,554 million in 1928, to \$21,958 million in 1956. On a per capita basis, personal income was \$463 in 1928 and \$1,365 in 1956, a nearly threefold increase. Personal disposable income rose from \$4,495 million to \$20,238 million, an increase of 175 per cent on a per capita basis. At the same time consumer prices were higher by 70 per cent, but the gain in per capita income in real terms is nevertheless substantial.

Some of the shifts in the sources of personal income, namely the greater relative importance of labour income and the concomitant decline in the importance of farm income and income of unincorporated business, were discussed earlier in the analysis of distributive shares and of the industrial origin of the product. It may be noted here that the sum of interest, dividends and net rental income of persons was a significantly smaller share of personal income in 1956 than in 1928, the reason being that disbursements of dividends did not keep pace with the rise in personal income.

# Personal Income - Percentage Distribution

	1928	1956
Wages, salaries, and supplementary labour		
income	59.2	64.8
Military pay and allowances	. 2	1. 9
Net income of farm operators from farm production	13.6	6.6
Net income of other unincorporated business	12.8	8. 8
Interest, dividends, and net rental income of persons	12.2	9.7
Transfer payments (excluding interest)	2.0	8-2
Personal income	100.0	100.0

The outstanding change in the sources of personal income over the period is the greatly enhanced importance of transfer payments, a reflection of the gradual evolution of fairly comprehensive social

security schemes. Transfer payments represented 8 per cent of personal income in 1956, in contrast to 2 per cent in 1928.

At the beginning of the period the only significant transfer payments were under workmens' compensation and grants to private non-commercial institutions (mainly hospitals and universities) at the provincial and local level and pensions to war veterans at the federal level. In 1927 the Federal Government undertook to share the cost of provincial old-age pension schemes. (During the depression, transfer payments rose sharply, mainly reflecting direct relief and in 1934 accounted for 7 per cent of personal income). In 1939 the Federal Government undertook to provide payments to farmers in areas of low crop yields in the west; in 1941 unemployment insurance was introduced; family allowances followed in 1944, universal old-age payments and pensions for the blind in 1952 and pensions for the disabled in 1955. Various special payments to veterans were of major importance in the years immediately following the war and pensions for the war-disabled are a continuing responsibility. In recent years, the largest transfer payments (excluding interest on the public debt) were family allowances, old-age security fund payments, both at the federal level, and grants to private noncommercial institutions, at the provincial and local level.

#### Government Income

The relatively large expansion in government expenditure was accompanied by striking changes in the sources of government revenue. In the early years of the period governments relied chiefly on indirect taxes but by the end of the period direct taxes had become the principal source of revenue. Thus in 1928, 72 per cent of all revenue was derived from indirect taxation, compared with only 45 per cent in 1956. Direct taxes on persons and on corporations rose in about the same proportion, the former from 6 per cent of all revenue in 1928 to 21 per cent in 1956 and the latter from 5 per cent in 1928 to 17 per cent in 1956.

As a consequence of these shifts of emphasis between various sources of revenue, both personal

and corporate direct taxes were much increased in relation to National Income. Personal direct taxes rose from 1 per cent of National Income in 1928 to 7½ per cent in 1956 while the corresponding increase in the proportion of corporate taxes to National Income was from 1 per cent to 6 per cent. By contrast, indirect taxes, which are best assessed in relation to Gross Nation Product, maintained a remarkably stable relationship, and represented 11 per cent of Gross National Product in 1928, and 12 per cent in 1956.

Sources of Government Revenue as a Percentage of Total

	1928	1956
Direct taxes — persons	6.2	20.9
Direct taxes — corporations	4.7	17.3
Withholding taxes	_	. 8
Indirect taxes	72.1	45.1
Investment income	14.7	9.9
Employer and employee contributions to social security and government pen-		
sion schemes	2.3	6.0
Government revenue	100.0	100.0

Government investment income includes the profits of such government business enterprises as the Canadian National Railways, provincial liquor commissions, and provincial and municipal public utilities, and the interest on loans and advances and on such public funds as the unemployment insurance and workmens' compensation funds. Government investment income declined in relative importance as a source of revenue, from 15 per cent in 1928 to 10 per cent in 1956.

Employer and employee contributions to social insurance and government pensions funds became a more important source of revenue during the period, being 6 per cent of the total in 1956, in contrast to 2 per cent in 1928. The introduction of unemployment insurance in 1941 and subsequent legislation which extended the coverage of the scheme is the main cause of this development.

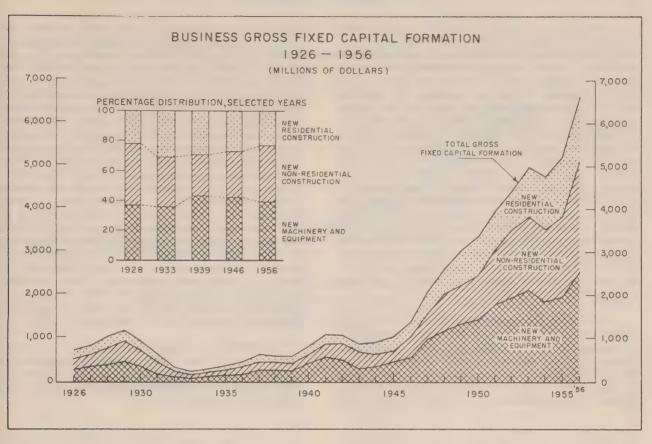
#### ECONOMIC FLUCTUATIONS, 1926-1956

#### Introduction

A description in chronological sequence of the fluctuations in economic activity from 1926-1956 should be prefaced by some general observations about the behaviour of the Canadian economy over cyclical fluctuations in economic activity.

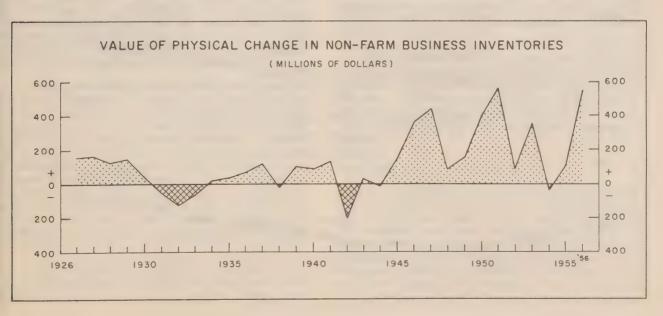
The variability of investment activity is the central factor in cyclical fluctuations. The most volatile component of demand is business expenditure for plant and equipment. Thus in 1928 business expenditure for plant and equipment accounted for 13 per cent of Gross National Expenditure and

declined catastrophically to less than 5 per cent in 1933 in the depths of the great depression; residential construction, which tends to be less unstable, represented less than 4 per cent of Gross National Expenditure in 1928 and about 2 per cent in 1933. In the investment boom of 1956 business expenditure for plant and equipment, at 17 per cent of Gross National Expenditure, was an even larger proportion of the total and with a further 5 per cent of total expenditure devoted to housing, business gross fixed capital formation absorbed 22 per cent of the nation's total spending, compared with less than 17 per cent in 1928.



A large part of the cyclical change in total output normally takes the form of changes in investment in inventories and in minor cycles movements in inventories may play a predominant part. The quantity of stocks required to produce and distribute goods changes with the level of economic activity and any contraction or expansion in economic activity is usually aggravated by the inventory liquidation or accumulation that accompanies it. Speculative motives, whether related to cyclical change itself or to political developments,

also affect the rate of inventory accumulation. Thus in 1928 and 1956, investment in business inventories accounted for about 2 per cent of Gross National Expenditure. In 1933 about 2 per cent of Gross National Expenditure represented the drawing down of stocks which were not being replenished out of current production. Following the Korean war in mid-1950 and the armistice three years later, fluctuations in investment in business inventories were important in determining the level of Gross National Product.

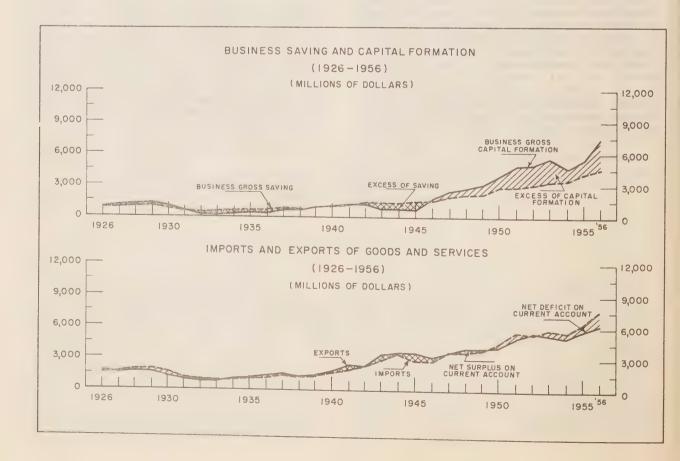


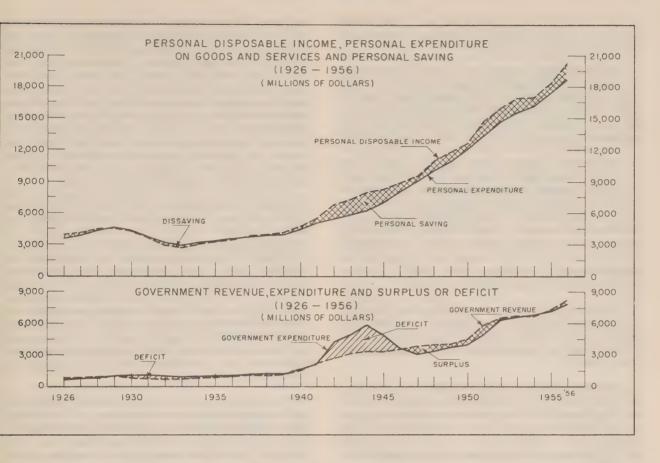
Traditionally, Canada's commodity exports have consisted of a comparatively small number of primary commodities and this generalization is still essentially valid despite diversification of export capacity in recent years. Hence, the value of exports fluctuates widely in response to changing external prices and changing conditions of supply and demand in international markets. Thus exports of goods and services accounted for more than 29 per cent of Gross National Expenditure in 1928 and only 21 per cent at their depression low in 1932. Imports are likewise subject to wide variations, because they are closely linked to changing levels of investment and expenditure on consumer durables (which have a high import content) and because they reflect changes in income. Since exports affect the level of employment and income, exports will within a short period of time affect the demand for imports. In 1928, 30 per cent of total expenditure was directed toward imported goods and services and less than 24 per cent in 1933.

By contrast, consumer expenditure is relatively stable over the trade cycle. This relative stability is related to the cyclical movement of personal income (and disposable income) as well as to rates of spending out of income. Personal income does not fluctuate as widely as National Income because dividend disbursements do not fully reflect the

variability of corporate profits and because the level of transfer payments is in part independent of changing levels of economic activity and in part has an inverse relationship to National Income. Thus transfer payments in the form of direct relief during the depression and in the form of unemployment insurance benefits in recent years moved in the opposite direction to National Income. With a progressive income tax, taxation is highly sensitive to changes in income, so that personal disposable income fluctuates more narrowly than personal income. Furthermore, part of the fluctuation in personal disposable income is met by variations in the rate of personal saving. Consumers tend to save more when incomes are rising and to save less, or even dissave in an effort to protect their standard of life, when incomes are falling. Thus consumer expenditure represents a higher proportion of Gross National Expenditure in periods of depression and a lower proportion in periods of prosperity even though it may be falling or rising in absolute terms. In 1933 consumer expenditure accounted for 85 per cent of aggregate expenditure in contrast to 71 per cent in 1928.

Government expenditure also tends to be fairly stable over the trade cycle, although stability necessarily implies changing relationships of government expenditure to Gross National Expenditure over prosperity and depression.





These generalizations about the behaviour of the components of demand do not, of course, apply to the special circumstances of a war-time economy. Between 1940 and 1945 there was a huge expansion in government expenditure. During part of that period business gross fixed capital formation declined absolutely as well as relatively, as many durable physical assets were purchased on government account. At the same time, war-time scarcities were reflected in depleted business inventories. Consumer expenditure rose both in volume and value throughout the war years but not nearly so much as Gross National Expenditure and in 1944 represented only 53 per cent of Gross National Expenditure.

Personal saving, which had been negative during the depressed thirties, rose rapidly during the war years and at its peak in 1944, represented nearly 15 per cent of Gross National Product and nearly 22 per cent of personal disposable income. This high rate or personal saving was the result of exhortations to save for patriotic reasons, strongly reinforced by rationing and war-time scarities of consumer goods. Even at the peak of war-time taxation in 1944, net government revenue never exceeded 20 per cent of Gross National product while government expenditure was 42 per cent of total expenditure.

Gross business saving does not fluctuate widely, since capital consumption allowances, which are related to the stock of capital, are the largest ele-

ment in the total. Gross business savings are not normally adequate to finance gross fixed capital formation.

During the war, when gross capital formation declined, both business savings and the large personal savings mentioned above were available to help finance the government's huge deficit. Beginning in 1947, and throughout virtually all the post-war period, the government was operating with a surplus, thereby providing savings to help finance the investment programme.

During most of the period 1950-1956, some part of the savings required to finance gross capital formation was provided from outside the domestic economy. This was represented by an increase in net foreign liabilities as indicated by the deficit in the balance of international payments on current account.

### 1926-1929

The depression that followed the first world war was sharp but short-lived. By 1923 world economic activity had resumed its upward course and the volume of world trade was almost restored to its pre-war level, thereby creating an environment favourable to the development of new resources and to general economic expansion in Canada. In addition, two special circumstances fostered growth in the Canadian economy, namely, favourable prices

for her principal export products and a series of good crops in a situation of strong international demand for wheat.

Thus the years 1926-1929 were the culmination of a period of rapid growth. Between 1926 and 1929 Gross National Product rose from \$5,152 million in 1926 to \$6,134 million in 1929, an increase of 19 per cent; population increased 6 per cent and employment 8 per cent.

A high and rapidly rising level of business investment in plant and equipment was the major factor in the expansion of output and income. Expenditures for this purpose, 10 per cent of Gross National Expenditure in 1926, rose to 15 per cent in 1929. The increase in this component, from \$501 million in 1926 to \$931 million in 1929, was slightly over 85 per cent. While expenditure on residential construction did rise from year to year, it was a much less important stimulating influence.

Consumer expenditure rose throughout the period, from \$3,542 million in 1926 to \$4,621 million in 1929, that is 30 per cent. The rise in expenditure on durables was particularly large, amounting to 50 per cent.

Government expenditure on goods and services rose continuously and in 1929 were higher by 31 per cent than in 1926. Provincial and municipal outlays reflected extensions and improvement in highways, and the provision of various services for a growing and increasingly urban population.

The changes in the value of exports of goods and services were comparatively small and not consistent from year to year. The value of imports of goods and services rose steadily and in 1929 was 28 per cent higher than in 1926. While a deficit on international current account emerged during the period, it was not significant in size until 1929, when it amounted to 5 per cent of Gross National Product.

Even before the onset of the world-wide depression was heralded by the stock market collapse in October 1929, certain unfavourable developments had occurred in the Canadian economy. Exports were appreciably lower in 1929 than in 1928. With good crops of wheat in 1928 in the main producing areas of the world, including Canada, a burdensome surplus was beginning to emerge. The Canadian wheat crop was poor in 1929 and the drop in farm production in conjunction with lower prices reduced net farm income by more than one third. In consequence of these developments, Gross National Product in 1929 was very little higher than in the previous year.

#### 1930-1933

The decline in business gross fixed capital formation in the first year of the depression was about of the same general order of magnitude as the increases in the preceding boom. Expenditures

for plant and equipment fell a little more than 20 per cent, and residential construction, where the preceding increases had been comparatively small, fell by 17 per cent. Exports of goods and services fell 21 per cent and imports less sharply, so that the deficit on current international account was even larger than in the preceding year. Government expenditures continued to rise, thereby providing some support to the level of economic activity. But consumer expenditure fell by 5½ per cent and purchases of consumer durables by nearly 20 per cent. The fall in consumer expenditure was somewhat less than the fall in personal disposable income.

Thus Gross National Product in 1930 was \$5,728 million, compared with \$6,134 million in 1929, a decline of nearly 7 per cent in current dollars and a somewhat smaller decline in real terms when the fall in prices is taken into account. It is estimated that at June 1st about 370 thousand persons were without jobs and seeking work, that is 9.1 per cent of the labour force. Indirect tax revenues, which are sensitive to changes in the level of economic activity, declined sharply and with the loss in this most important source of revenue and continued expansion in government expenditure, the government deficit amounted to about 4 per cent of Gross National Product.

In the following years, the rate of decline in Gross National Product accelerated. The falling off in business gross fixed capital formation gathered momentum and exports of goods and services continued to decline sharply. The downward pressure from these sources was reinforced by a fall in government expenditure and by the liquidation of business inventories. Consumer expenditure fell more steeply than in the first year of the depression.

The rate of decline in Gross National Product diminished appreciably in 1933, when the trough of the depression was reached. By that year Gross National Product had fallen to \$3,510 million, compared with \$6,134 million in 1929, which, when the precipitate fall in prices is taken into account, represents a decline of 30 per cent in real terms. The number of persons without jobs and seeking work had risen to 826 thousand, that is 19.3 per cent of the labour force. Business gross fixed capital formation had dwindled to \$234 million from \$1,161 million in 1929. The value of exports had been halved and the value of imports had fallen even more, bringing the current international account virtually into balance at a low level. Consumer expenditure, at a level of \$2,984 million, exceeded personal disposable income by nearly 10 per cent.

### 1934-1939

The year 1934 brought some measure of recovery, with all components of demand contributing to the reversal of the previous down-trend. The increases in investment in plant and equipment and in residential construction were notably large, bringing business gross fixed capital formation about 27 per cent above the level of the previous

year. Exports, which had already shown some improvement in 1933, advanced markedly in 1934. In the absence of a corresponding rise in imports, the external sector made a net addition to the demand for national output. Inventory liquidation gave way to accumulation and government expenditure was significantly higher. The rise in personal income provided the basis for a significant advance in consumer expenditure, notably in purchases of durables, and was accompanied by a drop in the hitherto high rate of personal dissaving.

The various forces making for recovery raised Gross National Product in 1934 to \$3,984 million, an increase of  $13\frac{1}{2}$  per cent, most of which represents an increase in volume.

Among the developments that may be noted on the income side are the steep rise in corporate profits and the decided improvement in farm income from the extremely low level of the previous year.

Government transfer payments, mostly in the form of direct relief, as well as expenditures for goods and services, continued to rise and since there was no corresponding rise in revenues, the government deficit was increased.

In the following three years, further advances in outlays for business gross fixed capital formation, gains in exports without a commensurate rise in imports and some increase in government expenditure continued to generate higher incomes and support higher consumer expenditure, thus providing an accumulation of forces making for recovery. However, recovery did not have the same momentum as the preceding contraction. Gross National Product at \$5,257 million in 1937 was nearly 50 per cent higher than in 1933 but when measured in terms of constant prices it was not quite restored to the 1929 peak.

The progress of recovery was interrupted in 1938 when Gross National Product was only fractionally higher than in the previous year. A short but severe recession developed in the United States in 1937 and expansion in that country was not resumed until the latter part of 1938. In Canada, a major decline occurred in exports of goods and services and there was a significant falling off in business gross fixed capital formation. Government expenditure rose, and with declining revenues the government deficit was substantially larger. Consumer expenditure was slightly higher, in line with the rise in personal disposable income.

The most important single factor tending to raise the level of Gross National Product in 1939 was the expansion of investment in inventories, probably related to the outbreak of war. Business gross fixed capital formation was unchanged and government and consumer expenditure rose moderately. There was a significant improvement in exports and a somewhat smaller proportionate rise in imports. Gross National Product at \$5,636 million was nearly 7 per cent higher than in 1938.

1940-1945

There was a great deal of slack in the Canadian economy when war was declared in September 1939. That the index of industrial employment was still somewhat below its 1929 peak is evidence of unused capacity and it is estimated that at June 1st some 529 thousand persons were without jobs and looking for work, that is 11.4 per cent of the labour force. In these circumstances a major increase in government expenditure, from \$683 million in 1939 to \$1,116 million in 1940, was consistent with substantial increases in other components of demand. Increases did in fact occur in all components except investment in inventories. In the first full year of war, Gross National Product rose to \$6,743 million, an increase of nearly 20 per cent in terms of current prices.

Likewise in 1941, despite the rapidly mounting tempo of the war effort following the military reverses in the summer of 1940, an expansion in other components of demand (except inventories) continued to accompany a huge expansion in government expenditure. Gross National Product rose to \$8,328 million, an increase of  $23\frac{1}{2}$  per cent.

By June 1st 1941, the armed services had risen from 9 thousand two years earlier to 296 thousand and non-agricultural employment had risen by more than 300 thousand. The number of persons without jobs and seeking work had fallen to 195 thousand or 4.4 per cent of the labour force. Thus by 1942 the prosecution of the war effort on the scale intended required that resources be increasingly diverted from the satisfaction of civilian needs.

In September 1939, the government had vested itself with the power to control foreign exchange, the use of materials and facilities and to take such steps as might be necessary to prevent an undue rise in prices. These powers were gradually invoked and by the end of 1941 much of the machinery of control had been set up. Meanwhile as the economy was moving into the zone of full employment, fiscal policies were directed toward securing the required diversion of resources. Thus the year 1942 marks a new phase in the evolution of the war economy.

Business gross fixed capital formation fell in 1942 and again but much more sharply in 1943, making way for war facilities undertaken on government account. There was a substantial drawing down of business inventories in 1942, reflecting the emergence of acute war-time shortages of materials and supplies. Consumer expenditure continued to rise in terms of both value and volume on a per capita basis as well as in total but purchases of durables were down sharply, reflecting war-time scarcities. By 1944 government expenditure on goods and service was at its peak of \$4,978 million and absorbed 42 per cent of the nation's output in contrast to 12 per cent in 1939.

Gross National Product rose from \$5,636 million in 1939 to \$11,850 million in 1944. The war-time shift in the composition of demand makes it difficult to measure how much of the rise in the value of national production is a consequence of higher prices. However, the constant dollar estimates suggest an increase in the volume of output of about two-thirds. Civilian employment non-farm rose from 2,740 thousand to 3,350 thousand and there were 780 thousand in the armed forces, in contrast to 9 thousand in 1939.

The expanding tax base and increased taxation had kept government revenue moving up more or less in line with government expenditure in 1940 and 1941. However, the next three years brought large and growing deficits, despite further increases in taxation. By 1944 the deficit amounted to \$2,585 million and represented 22 per cent of Gross National Product. These deficits were financed by selling war bonds to the public and the banking system.

Personal income rose from \$4,290 million in 1939 to \$8,865 million in 1944, but personal direct taxes absorbed only 2.6 per cent of income in 1939, and 9.5 per cent in 1944. At the same time, the rate of saving out of personal disposable income rose from 4.6 to 21.8 per cent.

In spite of the large reduction in government expenditure in 1945, Gross National Product was virtually unchanged in terms of value and only moderately lower in terms of volume. Expansion of business gross fixed capital formation, renewed investment in business inventories, and higher consumer expenditure, together with a favourable shift in the foreign balance, with exports remaining close to the level of the previous year while imports fell sharply, were sustaining influences in in the face of the drop in government expenditure.

#### 1946-1949

When the war ended, consumers and business had an accumulation of savings and a backlog of demand built up during the period of war-time scarcities. Moreover, war-damaged countries needed imports for relief and reconstruction and their demand was soon made effective by credit. In these circumstances, consumer expenditure surged forward, business embarked on a large programme of capital expenditure and the decline in exports was only temporary. Thus the transition to a peace-time economy operating at high levels was accomplished with only a moderate fall in real output. However, the strength of demand at home and abroad in a situation of rising external prices put pressure on the Canadian price level.

In the first post-war year, government expenditure was halved and exports fell more than 10 per cent. However, business gross fixed capital formation, investment in business inventories and consumer expenditure continued to advance, making

greater gains than in the previous year. On the other hand, imports receded slightly. As in 1945, Gross National Product was little changed in value terms and only a little lower in volume.

In spite of a slight fall in National Income in 1946, personal income at \$9,719 million was 6½ per cent higher than in the preceding year. This pronounced divergence is largely accounted for by an increase in transfer payments from \$546 million to \$1,106 million, mainly in the form of post-discharge benefits to veterans. Some reduction in personal income taxes contributed to raising disposable income somewhat more than personal income. The 15 per cent increase in consumer expenditure involved a drop in the rate of personal saving to 10 per cent, compared with 16 per cent the previous year.

Further sharp advances in private domestic demand occurred in 1947, the expansion in business gross fixed capital formation being particularly noteworthy. Although exports rose considerably, the rise in imports was even more pronounced and the surplus on current international account all but disappeared. The progressive relaxation and removal of controls, beginning in the latter part of 1946, made increasingly overt the hitherto largely suppressed pressure on prices. While Gross National Product at \$13,165 million was 11 per cent higher than in 1946, almost all of this increase represented higher prices. The small government deficit of 1946 was transformed into a fairly substantial surplus in 1947, representing 5.7 per cent of Gross National Product.

As a consequence of the rise in imports, in particular the rise in imports from the United States, Canada's reserves of gold and foreign exchange were rapidly depleted in the course of 1947. The fact that a large part of Canadian overseas exports were financed by credit while imports were paid for in cash contributed to the exchange problem. Accordingly, late in the year, measures were taken to restrict expenditures in U.S. dollars.

Throughout 1948 demand continued to press upon supply. Largely in consequence of the measures referred to above, imports were substantially reduced in volume, though little changed in value. In these circumstances, a substantial rise in the value of exports (reflecting for the most part higher prices) created a significant surplus on current international account. Business investment in plant and equipment made a substantial advance in real as well as in money terms, but residential construction was only slightly higher in real terms. Government expenditures reversed their downward course, mainly as a result of the continued rapid growth of expenditures at the provincial and municipal level. However, investment in business inventories was drastically reduced, no doubt reflecting in part the drawing down of stocks of imported goods.

The supply of some consumer goods in 1948 was limited by import restrictions which were concentrated in the consumer sector. Moreover, the embargo on the export to the United States of certain agricultural products was removed during the course of the year, thereby exposing those prices more fully to the influence of the higher prices prevailing in the United States. These factors contributed to the pressure on the consumer price level. In real terms, consumer expenditure fell slightly, though it was substantially higher in value.

Gross National Product rose to \$15,120 million, nearly 15 per cent higher than in 1947. The rise in real output was, however, little more than the small increase of the previous year.

In 1949 supply was coming into better balance with demand and external pressures on the price level were perceptibly weakened by the appearance of recessionary influences in the United States.

Investment in plant and equipment made a further advance in real as well as in value terms, but at an apprecially lower rate than in the previous year while residential construction made decidedly large gains. Consumer expenditure, stimulated by the repayment of the refundable portion of the income tax1, large retroactive payments on past crops and a reduction in income tax, rose about 8 per cent in value, of which about half represents a gain in real consumption. Government expenditure rose even more than in the previous year. Exports were somewhat lower, and imports higher, in value as well as in volume, thus reducing the surplus on international current account. Gross National Product rose to \$16,343 million, an increase of 8 per cent in current dollars. The rise in real output of nearly 4 per cent was the first significant post-war increase2.

#### 1950-1954

The outbreak of hostilities in Korea in mid-1950, bringing a resurgence of inflationary pressures and the beginning of an adjustment to rearmament, opened a new phase in Canada's post-war economic experience. This adjustment took place by stages which cut across calendar years, with the result that the annual estimates of Gross National Product tend to obscure the sequence of influences operating on the economy.

The first stage, from mid-1950 to mid-1951, was dominated by a sharp rise in investment in business inventories and in consumer purchasing. Both components of demand were inflated by fears of shortages and expectations of higher prices. Prices did,

1. In the Budget introduced in June 1942, part of the increase in taxation was made refundable within a

specified period after the end of the war.

2. This rise is partly attributable to the fact that
Newfoundland is included for the first time. If Newfoundland is left out of account, the gain in real output would
be 3 per cent.

in fact, rise very rapidly. Re-armament played a limited but increasingly important part during the period.

Meanwhile, the Federal Government had adopted measures to restrain inflationary pressures and to channel scarce resources into defence uses. By about the middle of 1951 the wave of forward buying subsided. Thereafter the expansionary influences were rapidly rising defence expenditure, investment in plant and equipment, much of it related to defence, and exports. By early 1952, there was widespread evidence of a downturn in prices and anti-inflationary measures were removed or relaxed.

During the course of 1952, with a substantial rise in real personal income and restrictions removed or relaxed, there was a resurgence of consumer expenditure and outlays for housing. By the end of the year, investment in inventories again became a positive factor. These new demands, superimposed on further advances in spending for defence and for plant and equipment, were met within the framework of relatively stable prices.

The Korean Armistice in mid-1953 marks still another stage in the process of adjustment. The decline in defence expenditure and a closely related development, the shift from accumulation to liquidation of business inventories, gave rise to recessionary influences in the North American economy. The dominant factor in Canada was the movement of business inventories. Thus the period 1953-1954 showed a mild contraction in economic activity.

The sequence of events outlined above may now be considered as they are reflected in the estimates of Gross National Product for calendar years.

In 1950 investment in business inventories amounted to \$399 million, compared with \$150 million in the preceding year. Consumer expenditure rose to \$12,026 million, an increase of 10 per cent in terms of current dollars, and of 7 per cent in terms of real consumption; the increase in purchases of durables was especially large. The rise in consumer expenditure reflected a distinct drop in the rate of personal saving as well as a rise in disposable income. The two components, investment in business inventories and consumer expenditure, together account for about 80 per cent of the increase in current dollar Gross National Product.

Another notable development of the year was the sharp rise in imports. With only a moderate rise in exports, the international current account was in deficit for the first time in the post-war period.

Government expenditure and business gross fixed capital formation both rose but at an appreciably lower rate than in the previous year. Gross National Product was \$18,006 million or about 10 per cent higher than in 1949 in current dollars and about 7 per cent higher in real terms.

The year 1951 clearly registers the impact of re-armament on the disposition of the nation's resources. Government expenditure on goods and services rose nearly 40 per cent and defence expenditure absorbed 5½ per cent of Gross National Product, in contrast to less than 3 per cent in 1950. Expenditures on plant and equipment rose some 24 per cent in value, with a distinct shift of emphasis toward investment related directly or indirectly to defence.

Among the anti-inflationary measures adopted following the outbreak of the Korean War were: restrictions on consumer credit, special excise taxes on durables and more stringent terms of mortgage credit. As these restrictions began to take effect, consumer demand weakened. While consumer expenditure for the year as a whole was higher by 12 per cent, there was very little increase in volume. The increase in disposable income was well in excess of the rise in expenditure, and the rate of personal saving much higher than in the previous year. At the same time, the tightening of mortgage credit, higher building costs and shortages of labour and materials discouraged activity in housing and residential construction was only slightly higher in value and substantially lower in volume.

The expanding tax base coupled with higher rates of taxation generated a much larger government surplus than in the previous year, in spite of the abrupt rise in government expenditure.

Reflecting the pressure of demand, Gross National Product rose to \$21,170 million, an increase of close to 18 per cent, of which 6 per cent represents a rise in the volume of national production.

In contrast to 1951, 1952 was a year of balanced growth, with supplies available to meet the requirements of defence as well as the growing demand in most other sectors. By the end of 1951, the pressure on prices had eased perceptibly and a general downturn in prices developed in the course of 1952.

Government expenditure made a further major advance, rising by 31 per cent, and investment in plant and equipment continued to gain, with the emphasis again falling on defence-supporting activities and the development of natural resources.

One of the year's notable developments was a very sharp rise in real personal income. The removal or relaxation early in the year of measures designed to discourage spending was an additional factor in the rapid expansion of consumer expenditure, which rose to \$14,781 million, an increase of 10 per cent; the increase of 7 per cent in volume was the largest of any previous post-war year except 1946. The increase in expenditure on durables was particularly large.

The conditions of mortgage credit had also been eased, and with the rise in personal income and the

improved supply of materials, the value of residential construction was moderately higher than that of the preceding year.

A marked improvement in the terms of trade, associated with the appreciation of the Canadian dollar, was one of the important developments of the year<sup>1</sup>. Export prices receded slightly but import prices were significantly lower, and with the volume of exports rising considerably more than the volume of imports, the international current account came back into surplus, following two years of deficit.

Gross National Product rose to \$23,995 million, in 1952 an increase of more than 13 per cent from that of the previous year. In terms of volume, the increase was nearly 8 per cent, the largest of any previous post-war year.

The year 1953 marks the end of the period of rapidly rising defence expenditures. The satisfaction of civilian needs then became the strong expansionary force in the economy. As in 1952, there was a substantial advance in real personal income and consumer expenditure and residential construction made impressive gains. Indeed, the increase in the value of residential construction, 25 per cent, was among the largest of the post-war period. Investment in plant and equipment continued to rise, and, in contrast to 1952, investment in business inventories was a fairly important positive factor.

Lower prices for some export products, together with a slight reduction in volume reduced the value of exports, while the value of imports continued to rise, generating a fairly large deficit on international current account.

Gross National Product rose to \$25,020 million in 1953, an increase of more than 4 per cent. With prices stable, on the average, most of this represents an increase in the volume of output. Agricultural production was below the extra-ordinarily high level of the previous year. The expansion of output was concentrated in the first part of the year; thereafter, the recessionary influences that developed in the North American economy following the Korean Armistice tended to check the growth of production.

Thus the year 1954 was predominantly one of recession. For the first time in the post-war period investment in plant and equipment was lower than in the preceding year, mainly reflecting an 11 per cent decline in purchases of machinery and equipment. The pronounced shift from accumulation to liquidation of business inventories was, however,

<sup>1.</sup> In the round of devaluations in September 1949, the exchange rate of the Canadian dollar, which had been fixed at par with the U.S. dollar since July 1946, was devalued to \$1.10. In October 1950, the rate was freed and allowed to find its own level. Between 1951 and 1952 the average noon spot rate for the U.S. dollar in Canadian funds moved from 105.28 to 97.89, an appreciation of 7 per cent. Thereafter, the annual changes in the rate were comparatively small.

the most important influence tending to depress the level of activity. Whereas in 1953 investment in business inventories was at the fairly high rate of \$351 million, in 1954 stocks were being drawn down at the rate of \$40 million.

In spite of some decline in employment, personal income was maintained, in consequence of higher wage rates and larger dividend and transfer payments. Although purchases of durables were down slightly, consumer expenditure as a whole rose nearly 4 per cent. Residential construction, encouraged by an improved supply and more liberal terms of mortgage credit, likewise made a moderate gain.

It is noteworthy that while exports were moderately lower, the decline is more than accounted for by reduced sales of wheat in a situation of improved world supply. The rising level of activity in Western Europe was an important factor sustaining demand for Canadian export products in the face of easing demand in the United States. Imports were likewise moderately lower, reflecting among other developments, the fall in expenditure on machinery and equipment and the heavy liquidation of business inventories.

The outcome of these conflicting movements was a Gross National Product of \$24,871 million in 1954, little changed in value and moderately lower in volume than in 1953. The drop in national output is more than accounted for by lower farm production.

#### 1955-1956

The year 1955 was one of renewed expansion. Business investment in plant and equipment resumed its upward course and investment in business inventories again became a positive factor. However, the main expansionary influence came from consumer expenditure and residential construction which, in making gains of 8 and 12 per cent respectively, together accounted for nearly two-thirds of the increase in Gross National Product. There was a major advance in consumer expenditure on durables. A remarkable increase in real personal income and the ready availability of mortgage credit account for the strength of demand in these two sectors.

Reflecting the recovery in industrial activity in the United States, the strength of overseas markets and the greater capacity to supply as past investments came to fruition, exports of goods and services rose by 12 per cent in 1955. The rise in imports, nearly 16 per cent, was even more striking; the major gains were in those commodity groups related to investment and consumer purchases of durables. The deficit on international current account rose from \$427 million to \$679 million, and represented 2½ per cent of Gross National Product.

Gross National Product rose to \$27,070 million in 1955, 9 per cent higher than in 1954. With prices virtually unchanged, there was a corresponding increase in volume, the largest gain of any post-war year. The slack present in the economy at the beginning of the year was progressively taken up and by the end of the year it appeared that any further major increase in demand would press hard on domestic resources.

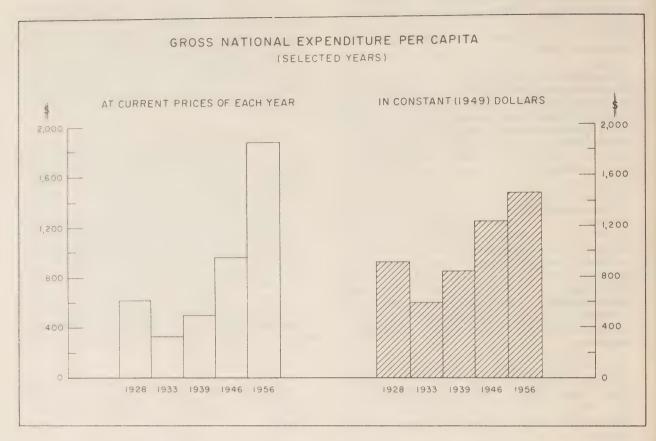
The tremendous size of the investment programme was the outstanding feature of 1956. The value of investment in plant and equipment rose by one-third above the high level of 1955 and represented 17 per cent of Gross National Product. the highest proportion recorded in the period considered here. The upsurge in investment reflected the strength of foreign demand for Canadian primary products and the development of new and traditional resources of fuel and energy. Although housing starts fell sharply during the course of the year, the value of residential construction was higher by 11 per cent. The pressure of demand on limited resources of manpower and materials was especially evident in the sector of capital goods and higher prices account for a considerable part of the value increases mentioned above.

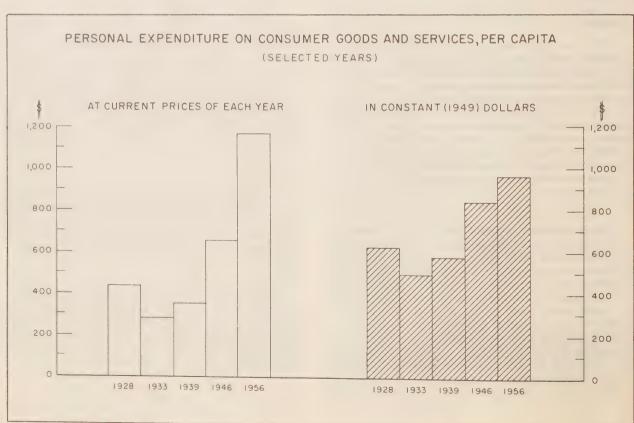
The heavy investment in durable physical assets was accompanied by a substantial building-up of business inventories, the largest accumulation since 1951.

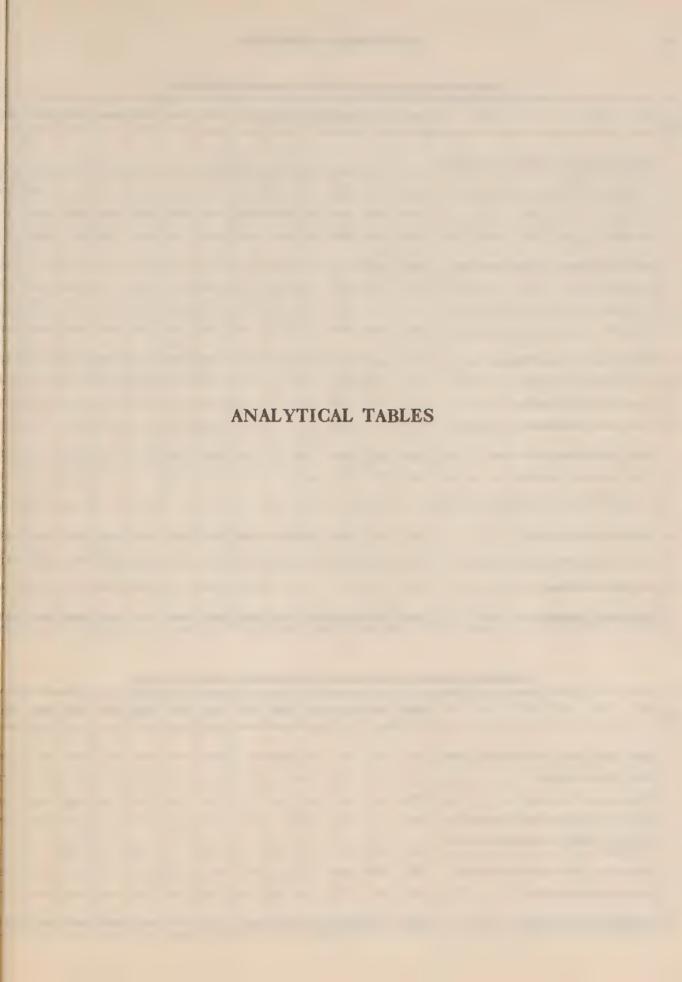
The gain in exports in 1956 was comparable with that of 1955 in percentage terms; it reflected some increase in prices and a sharp upturn in sales of wheat as well as continuing strong foreign demand for other products. The increase in imports of 20 per cent, among the largest of the post-war period, was related to the magnitude of the investment programme and the generally high level of economic activity. The deficit on international current account, \$1,358 million, was double that of the previous year and represented 4½ per cent of Gross National Product.

Consumer expenditure amounted to \$18,697 million, 7 per cent higher than in the preceding year, with the increases well distributed over the major categories. The rise in spending was accompanied by a significant increase in the rate of personal saving.

Gross National Product rose to \$30,098 million, 11 per cent above that of the preceding year. With all major components of demand showing some increase in prices, the corresponding gain in the volume of national output was 7 per cent, compared with the gain of 9 per cent in 1955.







Percentage Distribution of Gross National Expenditure, 1926-1956

	1010011480													
		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
No.														
1	Personal expenditure on consumer goods and services	68.7	70.2	71.4	75.3	76.2	80.3	83.5	85.0	79.9	77.4	76.3	73.8	73.8
2	Durable goods	5.4	5. 7	6.3	6.7	5.9	5. 7	5. 1	4.9	5. 5	5.9	6. 1	6.3	5. 8
3	Non-durable goods	35.7	37.7	39. 2	41.7	42. 1	43.5	45. 2	46.6	44.8	42.7	42. 1	41.1	40.4
4	Services	27.6	26.8	25. 9	26. 9	28. 2	31.1	33. 2	33.5	29.6	28. 8	28. 1	26.4	27.6
5	Government expenditure on goods and services	9.5	9.6	9.3	10.4	12.6	14.6	15.2	13.2	12.6	12.6	11.7	11.8	12.6
6	Federal	2.4	2. 4	2.3	2.6	3.0	3. 1	3. 1	3. 3	3. 2	3.7	3. 3	2.9	3. 3
7	Provincial	1.7	1.8	2.0	2. 2	2.8	3.3	3.3	2.8	3. 2	3. 2	3.0	3.8	4.1
8	Municipal	5.4	5.4	5.0	5.6	6.8	8. 2	8.8	7. 1	6.2	5.7	5.4	5. 1	5. 2
		13.7	15.0	16.6	18.9	16.2	13.2	8.3	6.7	7.5	8.6	9.8	12.0	11.2
9	Business gross fixed capital formation  New residential construction	3.9	3. 7	3.6	3.7	3. 4	3.4	2. 3	2. 1	2. 3	2.5	2. 8	3. 1	2.8
11	New non-residential construction	4.7	5. 4	6.8	8.0	6.7	5.6	3. 2	2.2	2.3	2. 7	3. 2	3.6	3. 2
12	New machinery and equipment	5. 1	5. 9	6.2	7. 2	6. 1	4. 2	2. 8	2.4	2. 9	3.4	3. 8	5.3	5. 2
• 20									0.0	.8	.9	- 1.5	. 2	1.1
13	Value of physical change in inventories	2.6	4.5	2.6	.9	1.3	- 2.0		- 2.6			1.5	2, 2	1
14	Non-farm business inventories	3. 0	2. 9	2. 1	2. 4	. 7	- 1.1	- 3.3	- 1.9	. 5	. 8	1.5	2,2	
15	Farm inventories and grain in commercial chan- nels	4	1.6	. 5	- 1.5	.6	9	. 7	7	. 3	. 1	- 3.0	- 2.0	1.5
16	Exports of goods and services	32.0	29.1	29.3	26.6	22.5	20.6	21.0	23.5	25.5	26.4	30.6	30.3	25.7
	Imports of goods and services	-29.5	-29.4	-29.9	-31.7	-28.4	-24.3	-23.5	-23.6	-23.8	-23.6	-25.4	-26.8	-23.8
17														6
18	Residual error of estimate	3-0	1.0	.7	4	4	- 2.4	- 1.9	- 2.2	- 2.5	- 2.3	- 1.5	- 1.3	8
19	Gross National Expenditure	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

# Percentage Distribution of National Income by Distributive Shares, 1926-1956

_											1			
No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
1	Wages, salaries, and supplementary labour Income	57.3	57.5	57.3	62.5	63.3	71.2	74.8	75.5	69.7	67.1	66.6	65.3	62.9
2	Military pay and allowances	.2	.2	.1	. 2	. 2	.2	.3	.3	.3	.3	. 3	.2	. 2
3	Corporation profits before taxes	7.9	8.4	9.2	8.4	3.3	. 4	- 3.7	3.1	6.9	7.6	9.3	11.1	8.4
4	Rent, interest, and miscellaneous investment income	7.0	7.2	7.6	7.8	7.7	8.0	8. 5	7.3	7.2	7.1	7.2	7.0	6.5
5	Accrued net income of farm operators from farm production	14.7	13.8	13.4	8.3	7.8	2.8	3.9	2.8	6.0	7.0	5.9	7.2	8.8
6	Net income of non-farm unincorporated business	11.8	12.2	12.4	13.1	12.3	12.3	12.1	11.9	11.3	11.5	11.8	11.4	11.5
7	Inventory valuation adjustment	1.1	.7	-	3	5.4	5.1	4.1	9	- 1.4	6	- 1.1	- 2.2	1.7
8	Net National Income at factor cost	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100. 0	100.0	100.0	100.0

# Percentage Distribution of Gross National Expenditure, 1926-1956

1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
8 66.5	61.3	53.2	52.3	52.8	58.9	67.8	69.1	66.6	66.8	66.8	63.5	61.6	62.4	65.1	64.5	62.0	1
6 5.8	5. 1	3. 2	2.6	2. 7	3. 2	5.0	6.4	6. 2	7.0	8. 1	7. 0	7.4	8.0	7.9	8. 4	8.0	2
8 36.7	34.9	31.4	31.9	31.7	35.4	40.8	41.0	40.0	38. 5	37. 3	35.9	33.6	32. 8	33.7	32.8	31.7	3
4 24.0	21.3	18.6	17.8	18.4	20.3	22.0	21.7	20.4	21.3	21.4	20.6	20.6	21.6	23.5	23.3	22.3	4
1 16.6	19.6	35.6	37.7	42.0	30.9	15. 2	11.7	11.9	13.0	13.0	15.5	17.8	17.7	17.9	17.6	17.5	5
7 10.1	14.2	31.3	33. 6	37. 7	26. 1	9.1	4.8	4.5	5.3	5.4	8. 1	10.4	10.2	9.8	9.2	8.9	6
4 2.3	2.0	1.5	1.4	1.5	1.7	2.4	2.9	3. 1	3. 1	3. 0	3.0	3. 0	2. 8	3.0	3. 1	3.5	7
0 4.2	3. 4	2.8	2.7	2.8	3. 1	3.7	4.0	4.3	4.6	4. 6	4. 4	4.4	4.7	5.1	5.3	5. 1	8
5 12.0	13.0	10.3	8.0	7.7	8.7	11.7	15.9	17.3	18.6	18.6	18.7	18.5	20.0	19.2	19.2	22.1	9
1 2.8	2.9	2. 1	2.0	2. 3	2.7	3. 1	3.8	4.0	4.9	4.9	4. 2	3. 9	4.7	4.9	5. 1	5. 1	10
9 3.1	3.4	3.4	3.3	2. 2	2. 1	3. 7	4.5	5.4	5.6	5. 8	6.0	6.5	6.9	6.7	6.8	8.5	11
5 6.1	6.7	4.8	2. 7	3. 2	3.9	4.9	7.6	7.9	8. 1	7. 9	8. 5	8.1	8.4	7.6	7. 3	8.5	12
0 3.8	1.1	1.3	- 1.6	- 1.2	- 2.6	2.8	3.0	.8	.3	3.1	4.4	2.2	2.3	6	1.1	2.7	13
8 1.3	1.6	- 2.0	.3	1	1.3	3.0	3. 3	.6	.9	2. 2	2.7	.4	1.4	2	. 4	1.8	14
2 2 5	5	3.3	- 1.9	- 1.1	- 3.9	2	3	. 2	6	. 9	1.7	1.8	.9	4	. 7	. 9	15
2.0		0.0			00.2												
7 26.8	29.6	22.9	31.1	30.1	30.4	27.1	27.6	26.8	24.6	23.2	24.0	23.2	21.6	20.7	21.3	21.1	16
6 -24.2	-23.7	-22.3	-26.3	-30.1	-24.6	-24.3	-27.5	-24.0	-23.6	-25.1	-26.5	-22.5	-23.4	-22.4	-23.8	-25.6	17
5 - 1.5	9	- 1.0	- 1.2	- 1.3	- 1.7	3	.2	.6	.3	. 4	. 4	8	6	.1	.1	.2	18
0 100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	1000	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	19
	8 66.5 6 5.8 8 36.7 4 24.0 1 16.6 7 10.1 4 2.3 0 4.2 5 12.0 1 2.8 9 3.1 5 6.1 0 3.8 8 1.3 2 2.5 7 26.8 6 -24.2 5 - 1.5	8 66.5 61.3 6 5.8 5.1 8 36.7 34.9 4 24.0 21.3 1 16.6 19.6 7 10.1 14.2 4 2.3 2.0 0 4.2 3.4 5 12.0 13.0 1 2.8 2.9 9 3.1 3.4 5 6.1 6.7 0 3.8 1.1 8 1.3 1.6 2 2.55 7 26.8 29.6 6 -24.2 -23.7 5 - 1.59	8 66.5 61.3 53.2 6 5.8 5.1 3.2 8 36.7 34.9 31.4 4 24.0 21.3 18.6 1 16.6 19.6 35.6 7 10.1 14.2 31.3 4 2.3 2.0 1.5 0 4.2 3.4 2.8 5 12.0 13.0 10.3 1 2.8 2.9 2.1 9 3.1 3.4 3.4 5 6.1 6.7 4.8 0 3.8 1.1 1.3 8 1.3 1.6 - 2.0 2 2.55 3.3 7 26.8 29.6 22.9 6 -24.2 -23.7 -22.3 5 - 1.59 - 1.0	8       66.5       61.3       53.2       52.3         6       5.8       5.1       3.2       2.6         8       36.7       34.9       31.4       31.9         4       24.0       21.3       18.6       17.8         1       16.6       19.6       35.6       37.7         7       10.1       14.2       31.3       33.6         4       2.3       2.0       1.5       1.4         0       4.2       3.4       2.8       2.7         5       12.0       13.0       10.3       8.0         1       2.8       2.9       2.1       2.0         9       3.1       3.4       3.4       3.3         5       6.1       6.7       4.8       2.7         0       3.8       1.1       1.3       -1.6         8       1.3       1.6       -2.0       .3         2       2.5      5       3.3       -1.9         7       26.8       29.6       22.9       31.1         6       -24.2       -23.7       -22.3       -26.3         5       -1.5      9       -1.0 <t< th=""><th>8       66.5       61.3       53.2       52.3       52.8         6       5.8       5.1       3.2       2.6       2.7         8       36.7       34.9       31.4       31.9       31.7         4       24.0       21.3       18.6       17.8       18.4         1       16.6       19.6       35.6       37.7       42.0         7       10.1       14.2       31.3       33.6       37.7         4       2.3       2.0       1.5       1.4       1.5         0       4.2       3.4       2.8       2.7       2.8         5       12.0       13.0       10.3       8.0       7.7         1       2.8       2.9       2.1       2.0       2.3         9       3.1       3.4       3.4       3.3       2.2         5       6.1       6.7       4.8       2.7       3.2         0       3.8       1.1       1.3       - 1.6       - 1.2         8       1.3       1.6       - 2.0       .3      1         2       2.5      5       3.3       - 1.9       - 1.1         7</th><th>8       66.5       61.3       53.2       52.3       52.8       58.9         6       5.8       5.1       3.2       2.6       2.7       3.2         8       36.7       34.9       31.4       31.9       31.7       35.4         4       24.0       21.3       18.6       17.8       18.4       20.3         1       16.6       19.6       35.6       37.7       42.0       30.9         7       10.1       14.2       31.3       33.6       37.7       26.1         4       2.3       2.0       1.5       1.4       1.5       1.7         0       4.2       3.4       2.8       2.7       2.8       3.1         5       12.0       13.0       10.3       8.0       7.7       8.7         9       3.1       3.4       3.4       3.3       2.2       2.1         5       6.1       6.7       4.8       2.7       3.2       3.9         0       3.8       1.1       1.3       -1.6       -1.2       -2.6         8       1.3       1.6       -2.0       .3      1       1.3         2       2.5</th><th>8       66.5       61.3       53.2       52.3       52.8       58.9       67.8         6       5.8       5.1       3.2       2.6       2.7       3.2       5.0         8       36.7       34.9       31.4       31.9       31.7       35.4       40.8         4       24.0       21.3       18.6       17.8       18.4       20.3       22.0         1       16.6       19.6       35.6       37.7       42.0       30.9       15.2         7       10.1       14.2       31.3       33.6       37.7       26.1       9.1         4       2.3       2.0       1.5       1.4       1.5       1.7       2.4         0       4.2       3.4       2.8       2.7       2.8       3.1       3.7         5       12.0       13.0       10.3       8.0       7.7       8.7       11.7         1       2.8       2.9       2.1       2.0       2.3       2.7       3.1         9       3.1       3.4       3.4       3.3       2.2       2.1       3.7         5       6.1       6.7       4.8       2.7       3.2       3.9</th></t<> <th>8       66.5       61.3       53.2       52.3       52.8       58.9       67.8       69.1         6       5.8       5.1       3.2       2.6       2.7       3.2       5.0       6.4         8       36.7       34.9       31.4       31.9       31.7       35.4       40.8       41.0         4       24.0       21.3       18.6       17.8       18.4       20.3       22.0       21.7         1       16.6       19.6       35.6       37.7       42.0       30.9       15.2       11.7         7       10.1       14.2       31.3       33.6       37.7       26.1       9.1       4.8         4       2.3       2.0       1.5       1.4       1.5       1.7       2.4       2.9         0       4.2       3.4       2.8       2.7       2.8       3.1       3.7       4.0         5       12.0       13.0       10.3       8.0       7.7       8.7       11.7       15.9         1       2.8       2.9       2.1       2.0       2.3       2.7       3.1       3.8         9       3.1       3.4       3.4       3.3       <td< th=""><th>8       66.5       61.3       53.2       52.3       52.8       58.9       67.8       69.1       66.6         6       5.8       5.1       3.2       2.6       2.7       3.2       5.0       6.4       6.2         8       36.7       34.9       31.4       31.9       31.7       35.4       40.8       41.0       40.0         4       24.0       21.3       18.6       17.8       18.4       20.3       22.0       21.7       20.4         1       16.6       19.6       35.6       37.7       42.0       30.9       15.2       11.7       11.9         7       10.1       14.2       31.3       33.6       37.7       26.1       9.1       4.8       4.5         4       2.3       2.0       1.5       1.4       1.5       1.7       2.4       2.9       3.1         0       4.2       3.4       2.8       2.7       2.8       3.1       3.7       4.0       4.3         5       12.0       13.0       10.3       8.0       7.7       8.7       11.7       15.9       17.3         1       2.8       2.9       2.1       2.0       2.3</th><th>8       66.5       61.3       53.2       52.3       52.8       58.9       67.8       69.1       66.6       66.8         6       5.8       5.1       3.2       2.6       2.7       3.2       5.0       6.4       6.2       7.0         8       36.7       34.9       31.4       31.9       31.7       35.4       40.8       41.0       40.0       38.5         4       24.0       21.3       18.6       17.8       18.4       20.3       22.0       21.7       20.4       21.3         1       16.6       19.6       35.6       37.7       42.0       30.9       15.2       11.7       11.9       13.0         7       10.1       14.2       31.3       33.6       37.7       26.1       9.1       4.8       4.5       5.3         4       2.3       2.0       1.5       1.4       1.5       1.7       2.4       2.9       3.1       3.1         0       4.2       3.4       2.8       2.7       2.8       3.1       3.7       4.0       4.3       4.6         5       12.0       13.0       10.3       8.0       7.7       8.7       11.7       15.9<th>8       66.5       61.3       53.2       52.3       52.8       58.9       67.8       69.1       66.6       66.8       66.8         6       5.8       5.1       3.2       2.6       2.7       3.2       5.0       6.4       6.2       7.0       8.1         8       36.7       34.9       31.4       31.9       31.7       35.4       40.8       41.0       40.0       38.5       37.3         4       24.0       21.3       18.6       17.8       18.4       20.3       22.0       21.7       20.4       21.3       21.4         1       16.6       19.6       35.6       37.7       42.0       30.9       15.2       11.7       11.9       13.0       13.0         7       10.1       14.2       31.3       33.6       37.7       26.1       9.1       4.8       4.5       5.3       5.4         4       2.3       2.0       1.5       1.4       1.5       1.7       2.4       2.9       3.1       3.1       3.0         0       4.2       3.4       2.8       2.7       2.8       3.1       3.7       4.0       4.3       4.6       4.6         5</th></th></td<><th>8       66.5       61.3       53.2       52.8       58.9       67.8       69.1       66.6       66.8       66.8       63.5         6       5.8       5.1       3.2       2.6       2.7       3.2       5.0       6.4       6.2       7.0       8.1       7.0         8       36.7       34.9       31.4       31.9       31.7       35.4       40.8       41.0       40.0       38.5       37.3       35.9         4       24.0       21.3       18.6       17.8       18.4       20.3       22.0       21.7       20.4       21.3       21.4       20.6         1       16.6       19.6       35.6       37.7       42.0       30.9       15.2       11.7       11.9       13.0       13.0       15.5         7       10.1       14.2       31.3       33.6       37.7       26.1       9.1       4.8       4.5       5.3       5.4       8.1         4       2.3       2.0       1.5       1.4       1.5       1.7       2.4       2.9       3.1       3.1       3.0       3.0         0       4.2       3.4       2.8       2.7       2.8       3.1       3.</th><th>8       66.5       61.3       53.2       52.3       52.8       58.9       67.8       69.1       66.6       66.8       66.8       63.5       61.6         6       5.8       5.1       3.2       2.6       2.7       3.2       5.0       6.4       6.2       7.0       8.1       7.0       7.4         8       36.7       34.9       31.4       31.9       31.7       35.4       40.8       41.0       40.0       38.5       37.3       35.9       33.6         4       24.0       21.3       18.6       17.8       18.4       20.3       22.0       21.7       20.4       21.3       21.4       20.6       20.6         1       16.6       19.6       35.6       37.7       42.0       30.9       15.2       11.7       11.9       13.0       13.0       15.5       17.8         7       10.1       14.2       31.3       33.6       37.7       26.1       9.1       4.8       4.5       5.3       5.4       8.1       10.4         4       2.3       2.0       1.5       1.4       1.5       1.7       2.4       2.9       3.1       3.1       3.0       3.0       3.0</th><th>8         66.5         61.3         53.2         52.3         52.8         58.9         67.8         69.1         66.6         66.8         66.8         63.5         61.6         62.4           6         5.8         5.1         3.2         2.6         2.7         3.2         5.0         6.4         6.2         7.0         8.1         7.0         7.4         8.0           8         36.7         34.9         31.4         31.9         31.7         35.4         40.8         41.0         40.0         38.5         37.3         35.9         33.6         32.8           4         24.0         21.3         18.6         17.8         18.4         20.3         22.0         21.7         20.4         21.3         21.4         20.6         20.6         21.6           1         16.6         19.6         35.6         37.7         42.0         30.9         15.2         11.7         11.9         13.0         13.0         15.5         17.8         17.7           7         10.1         14.2         31.3         33.6         37.7         26.1         9.1         4.8         4.5         5.3         5.4         8.1         10.4         10.2<th>8       66.5       61.3       53.2       52.3       52.8       58.9       67.8       69.1       66.6       66.8       66.8       63.5       61.6       62.4       65.1         6       5.8       5.1       3.2       2.6       2.7       3.2       5.0       6.4       6.2       7.0       8.1       7.0       7.4       8.0       7.9         8       36.7       34.9       31.4       31.9       31.7       35.4       40.8       41.0       40.0       38.5       37.3       35.9       33.6       32.8       33.7         4       24.0       21.3       18.6       17.8       18.4       20.3       22.0       21.7       20.4       21.3       21.4       20.6       20.6       21.6       23.5         1       16.8       19.6       35.6       37.7       42.0       30.9       15.2       11.7       11.9       13.0       13.0       15.5       17.8       17.7       17.9         7       10.1       14.2       31.3       33.6       37.7       26.1       9.1       4.8       4.5       5.3       5.4       8.1       10.4       10.2       9.8         4       2.3&lt;</th><th>8 66.5 61.3 53.2 52.3 52.8 58.9 67.8 69.1 66.6 66.8 66.8 63.5 61.6 62.4 65.1 64.5 65.8 5.1 3.2 2.6 2.7 3.2 5.0 6.4 6.2 7.0 8.1 7.0 7.4 8.0 7.9 8.4 8 36.7 34.9 31.4 31.9 31.7 35.4 40.8 41.0 40.0 38.5 37.3 35.9 33.6 32.8 33.7 32.8 4 24.0 21.3 18.6 17.8 18.4 20.3 22.0 21.7 20.4 21.3 21.4 20.6 20.6 21.6 23.5 23.3 1 16.6 19.6 35.6 37.7 42.0 30.9 15.2 11.7 11.9 13.0 13.0 15.5 17.8 17.7 17.9 17.6 7 10.1 14.2 31.3 33.6 37.7 26.1 9.1 4.8 4.5 5.3 5.4 8.1 10.4 10.2 9.8 9.2 4 2.3 2.0 1.5 1.4 1.5 1.7 2.4 2.9 3.1 3.1 3.1 3.0 3.0 3.0 2.8 3.0 3.1 0 4.2 3.4 2.8 2.7 2.8 3.1 3.7 4.0 4.3 4.6 4.6 4.4 4.4 4.7 5.1 5.3 5 12.0 13.0 10.3 8.0 7.7 8.7 11.7 15.9 17.3 18.6 18.6 18.7 18.5 20.0 19.2 19.2 1 2.8 2.9 2.1 2.0 2.3 2.7 3.1 3.8 4.0 4.9 4.9 4.9 4.2 3.9 4.7 4.9 5.1 9.1 1.2 2.5 2.1 3.7 4.5 5.4 5.6 5.8 6.0 6.5 6.9 6.7 6.8 5 6.1 6.7 4.8 2.7 3.2 3.9 4.9 7.6 7.9 8.1 7.9 8.5 8.1 8.4 7.6 7.3 0 3.8 1.1 1.3 -1.6 -1.2 -2.6 2.8 3.0 3.3 3.0 3.3 3.1 4.4 2.2 2.3 -6 1.1 8.1 3 1.6 -2.0 3.3 -1.1 1.3 3.0 3.3 3.0 3.3 3.0 3.2 2.2 2.7 3.4 1.5 3.0 3.3 3.0 3.2 2.8 2.7 3.2 3.9 4.9 7.6 7.9 8.1 7.9 8.5 8.1 8.4 7.6 7.3 6.8 1.3 1.3 1.6 -2.0 3.3 -1.1 1.3 3.0 3.3 3.0 3.3 3.0 3.2 2.2 2.7 3.4 1.4 1.4 2.2 2.3 -6 1.1 8.1 3 1.6 -2.0 3.3 -1.1 1.3 3.0 3.3 3.0 3.3 3.0 3.2 2.2 2.7 3.4 2.4 2.2 2.3 -6 1.1 3.1 3.1 3.0 3.3 3.1 4.4 2.2 2.3 2.3 -6 1.1 3.1 3.1 3.0 3.3 3.0 3.3 3.0 3.0 3.0 3.0 3.0 3.0</th><th>8 66.5 61.3 53.2 52.3 52.8 58.9 67.8 69.1 66.6 66.8 66.8 63.5 61.6 62.4 65.1 64.5 62.0 6 5.8 5.1 3.2 2.6 2.7 3.2 5.0 6.4 6.2 7.0 8.1 7.0 7.4 8.0 7.9 8.4 8.0 8.36.7 34.9 31.4 31.9 31.7 35.4 40.8 41.0 40.0 38.5 37.3 35.9 33.6 32.8 33.7 32.8 31.7 42.0 21.3 18.6 17.8 18.4 20.3 22.0 21.7 20.4 21.3 21.4 20.6 20.6 21.6 23.5 23.3 22.3 1 16.6 19.6 35.6 37.7 42.0 30.9 15.2 11.7 11.9 13.0 13.0 15.5 17.8 17.7 17.9 17.6 17.5 7 10.1 14.2 31.3 33.6 37.7 26.1 9.1 4.8 4.5 5.3 5.4 8.1 10.4 10.2 9.8 9.2 8.9 4 2.3 2.0 1.5 1.4 1.5 1.7 2.4 2.9 3.1 3.1 3.1 3.0 3.0 3.0 3.0 2.8 3.0 3.1 3.5 1 2.0 13.0 10.3 8.0 7.7 8.7 11.7 15.9 17.3 18.6 18.6 18.7 18.5 20.0 19.2 19.2 22.1 1 2.8 2.9 2.1 2.0 2.3 2.7 3.1 3.8 4.0 4.9 4.9 4.9 4.2 3.9 4.7 4.9 5.1 5.1 5.1 12.1 12.8 2.7 3.2 3.9 4.9 7.6 7.9 8.1 7.9 8.5 8.1 8.4 7.6 7.3 8.5 1 8.1 1.3 1.3 1.3 1.3 1.4 1.4 2.2 2.3 2.3 2.4 1.8 2.5 1.3 1.3 1.3 1.6 2.0 3.3 2.1 1.3 3.0 3.3 3.3 3.0 3.1 1.3 3.5 3.5 1.1 1.3 1.6 2.0 3.3 2.1 1.3 3.0 3.3 3.0 3.1 1.3 3.5 3.5 3.1 3.1 3.1 3.1 3.1 3.1 3.1 3.1 3.1 3.1</th></th></th>	8       66.5       61.3       53.2       52.3       52.8         6       5.8       5.1       3.2       2.6       2.7         8       36.7       34.9       31.4       31.9       31.7         4       24.0       21.3       18.6       17.8       18.4         1       16.6       19.6       35.6       37.7       42.0         7       10.1       14.2       31.3       33.6       37.7         4       2.3       2.0       1.5       1.4       1.5         0       4.2       3.4       2.8       2.7       2.8         5       12.0       13.0       10.3       8.0       7.7         1       2.8       2.9       2.1       2.0       2.3         9       3.1       3.4       3.4       3.3       2.2         5       6.1       6.7       4.8       2.7       3.2         0       3.8       1.1       1.3       - 1.6       - 1.2         8       1.3       1.6       - 2.0       .3      1         2       2.5      5       3.3       - 1.9       - 1.1         7	8       66.5       61.3       53.2       52.3       52.8       58.9         6       5.8       5.1       3.2       2.6       2.7       3.2         8       36.7       34.9       31.4       31.9       31.7       35.4         4       24.0       21.3       18.6       17.8       18.4       20.3         1       16.6       19.6       35.6       37.7       42.0       30.9         7       10.1       14.2       31.3       33.6       37.7       26.1         4       2.3       2.0       1.5       1.4       1.5       1.7         0       4.2       3.4       2.8       2.7       2.8       3.1         5       12.0       13.0       10.3       8.0       7.7       8.7         9       3.1       3.4       3.4       3.3       2.2       2.1         5       6.1       6.7       4.8       2.7       3.2       3.9         0       3.8       1.1       1.3       -1.6       -1.2       -2.6         8       1.3       1.6       -2.0       .3      1       1.3         2       2.5	8       66.5       61.3       53.2       52.3       52.8       58.9       67.8         6       5.8       5.1       3.2       2.6       2.7       3.2       5.0         8       36.7       34.9       31.4       31.9       31.7       35.4       40.8         4       24.0       21.3       18.6       17.8       18.4       20.3       22.0         1       16.6       19.6       35.6       37.7       42.0       30.9       15.2         7       10.1       14.2       31.3       33.6       37.7       26.1       9.1         4       2.3       2.0       1.5       1.4       1.5       1.7       2.4         0       4.2       3.4       2.8       2.7       2.8       3.1       3.7         5       12.0       13.0       10.3       8.0       7.7       8.7       11.7         1       2.8       2.9       2.1       2.0       2.3       2.7       3.1         9       3.1       3.4       3.4       3.3       2.2       2.1       3.7         5       6.1       6.7       4.8       2.7       3.2       3.9	8       66.5       61.3       53.2       52.3       52.8       58.9       67.8       69.1         6       5.8       5.1       3.2       2.6       2.7       3.2       5.0       6.4         8       36.7       34.9       31.4       31.9       31.7       35.4       40.8       41.0         4       24.0       21.3       18.6       17.8       18.4       20.3       22.0       21.7         1       16.6       19.6       35.6       37.7       42.0       30.9       15.2       11.7         7       10.1       14.2       31.3       33.6       37.7       26.1       9.1       4.8         4       2.3       2.0       1.5       1.4       1.5       1.7       2.4       2.9         0       4.2       3.4       2.8       2.7       2.8       3.1       3.7       4.0         5       12.0       13.0       10.3       8.0       7.7       8.7       11.7       15.9         1       2.8       2.9       2.1       2.0       2.3       2.7       3.1       3.8         9       3.1       3.4       3.4       3.3 <td< th=""><th>8       66.5       61.3       53.2       52.3       52.8       58.9       67.8       69.1       66.6         6       5.8       5.1       3.2       2.6       2.7       3.2       5.0       6.4       6.2         8       36.7       34.9       31.4       31.9       31.7       35.4       40.8       41.0       40.0         4       24.0       21.3       18.6       17.8       18.4       20.3       22.0       21.7       20.4         1       16.6       19.6       35.6       37.7       42.0       30.9       15.2       11.7       11.9         7       10.1       14.2       31.3       33.6       37.7       26.1       9.1       4.8       4.5         4       2.3       2.0       1.5       1.4       1.5       1.7       2.4       2.9       3.1         0       4.2       3.4       2.8       2.7       2.8       3.1       3.7       4.0       4.3         5       12.0       13.0       10.3       8.0       7.7       8.7       11.7       15.9       17.3         1       2.8       2.9       2.1       2.0       2.3</th><th>8       66.5       61.3       53.2       52.3       52.8       58.9       67.8       69.1       66.6       66.8         6       5.8       5.1       3.2       2.6       2.7       3.2       5.0       6.4       6.2       7.0         8       36.7       34.9       31.4       31.9       31.7       35.4       40.8       41.0       40.0       38.5         4       24.0       21.3       18.6       17.8       18.4       20.3       22.0       21.7       20.4       21.3         1       16.6       19.6       35.6       37.7       42.0       30.9       15.2       11.7       11.9       13.0         7       10.1       14.2       31.3       33.6       37.7       26.1       9.1       4.8       4.5       5.3         4       2.3       2.0       1.5       1.4       1.5       1.7       2.4       2.9       3.1       3.1         0       4.2       3.4       2.8       2.7       2.8       3.1       3.7       4.0       4.3       4.6         5       12.0       13.0       10.3       8.0       7.7       8.7       11.7       15.9<th>8       66.5       61.3       53.2       52.3       52.8       58.9       67.8       69.1       66.6       66.8       66.8         6       5.8       5.1       3.2       2.6       2.7       3.2       5.0       6.4       6.2       7.0       8.1         8       36.7       34.9       31.4       31.9       31.7       35.4       40.8       41.0       40.0       38.5       37.3         4       24.0       21.3       18.6       17.8       18.4       20.3       22.0       21.7       20.4       21.3       21.4         1       16.6       19.6       35.6       37.7       42.0       30.9       15.2       11.7       11.9       13.0       13.0         7       10.1       14.2       31.3       33.6       37.7       26.1       9.1       4.8       4.5       5.3       5.4         4       2.3       2.0       1.5       1.4       1.5       1.7       2.4       2.9       3.1       3.1       3.0         0       4.2       3.4       2.8       2.7       2.8       3.1       3.7       4.0       4.3       4.6       4.6         5</th></th></td<> <th>8       66.5       61.3       53.2       52.8       58.9       67.8       69.1       66.6       66.8       66.8       63.5         6       5.8       5.1       3.2       2.6       2.7       3.2       5.0       6.4       6.2       7.0       8.1       7.0         8       36.7       34.9       31.4       31.9       31.7       35.4       40.8       41.0       40.0       38.5       37.3       35.9         4       24.0       21.3       18.6       17.8       18.4       20.3       22.0       21.7       20.4       21.3       21.4       20.6         1       16.6       19.6       35.6       37.7       42.0       30.9       15.2       11.7       11.9       13.0       13.0       15.5         7       10.1       14.2       31.3       33.6       37.7       26.1       9.1       4.8       4.5       5.3       5.4       8.1         4       2.3       2.0       1.5       1.4       1.5       1.7       2.4       2.9       3.1       3.1       3.0       3.0         0       4.2       3.4       2.8       2.7       2.8       3.1       3.</th> <th>8       66.5       61.3       53.2       52.3       52.8       58.9       67.8       69.1       66.6       66.8       66.8       63.5       61.6         6       5.8       5.1       3.2       2.6       2.7       3.2       5.0       6.4       6.2       7.0       8.1       7.0       7.4         8       36.7       34.9       31.4       31.9       31.7       35.4       40.8       41.0       40.0       38.5       37.3       35.9       33.6         4       24.0       21.3       18.6       17.8       18.4       20.3       22.0       21.7       20.4       21.3       21.4       20.6       20.6         1       16.6       19.6       35.6       37.7       42.0       30.9       15.2       11.7       11.9       13.0       13.0       15.5       17.8         7       10.1       14.2       31.3       33.6       37.7       26.1       9.1       4.8       4.5       5.3       5.4       8.1       10.4         4       2.3       2.0       1.5       1.4       1.5       1.7       2.4       2.9       3.1       3.1       3.0       3.0       3.0</th> <th>8         66.5         61.3         53.2         52.3         52.8         58.9         67.8         69.1         66.6         66.8         66.8         63.5         61.6         62.4           6         5.8         5.1         3.2         2.6         2.7         3.2         5.0         6.4         6.2         7.0         8.1         7.0         7.4         8.0           8         36.7         34.9         31.4         31.9         31.7         35.4         40.8         41.0         40.0         38.5         37.3         35.9         33.6         32.8           4         24.0         21.3         18.6         17.8         18.4         20.3         22.0         21.7         20.4         21.3         21.4         20.6         20.6         21.6           1         16.6         19.6         35.6         37.7         42.0         30.9         15.2         11.7         11.9         13.0         13.0         15.5         17.8         17.7           7         10.1         14.2         31.3         33.6         37.7         26.1         9.1         4.8         4.5         5.3         5.4         8.1         10.4         10.2<th>8       66.5       61.3       53.2       52.3       52.8       58.9       67.8       69.1       66.6       66.8       66.8       63.5       61.6       62.4       65.1         6       5.8       5.1       3.2       2.6       2.7       3.2       5.0       6.4       6.2       7.0       8.1       7.0       7.4       8.0       7.9         8       36.7       34.9       31.4       31.9       31.7       35.4       40.8       41.0       40.0       38.5       37.3       35.9       33.6       32.8       33.7         4       24.0       21.3       18.6       17.8       18.4       20.3       22.0       21.7       20.4       21.3       21.4       20.6       20.6       21.6       23.5         1       16.8       19.6       35.6       37.7       42.0       30.9       15.2       11.7       11.9       13.0       13.0       15.5       17.8       17.7       17.9         7       10.1       14.2       31.3       33.6       37.7       26.1       9.1       4.8       4.5       5.3       5.4       8.1       10.4       10.2       9.8         4       2.3&lt;</th><th>8 66.5 61.3 53.2 52.3 52.8 58.9 67.8 69.1 66.6 66.8 66.8 63.5 61.6 62.4 65.1 64.5 65.8 5.1 3.2 2.6 2.7 3.2 5.0 6.4 6.2 7.0 8.1 7.0 7.4 8.0 7.9 8.4 8 36.7 34.9 31.4 31.9 31.7 35.4 40.8 41.0 40.0 38.5 37.3 35.9 33.6 32.8 33.7 32.8 4 24.0 21.3 18.6 17.8 18.4 20.3 22.0 21.7 20.4 21.3 21.4 20.6 20.6 21.6 23.5 23.3 1 16.6 19.6 35.6 37.7 42.0 30.9 15.2 11.7 11.9 13.0 13.0 15.5 17.8 17.7 17.9 17.6 7 10.1 14.2 31.3 33.6 37.7 26.1 9.1 4.8 4.5 5.3 5.4 8.1 10.4 10.2 9.8 9.2 4 2.3 2.0 1.5 1.4 1.5 1.7 2.4 2.9 3.1 3.1 3.1 3.0 3.0 3.0 2.8 3.0 3.1 0 4.2 3.4 2.8 2.7 2.8 3.1 3.7 4.0 4.3 4.6 4.6 4.4 4.4 4.7 5.1 5.3 5 12.0 13.0 10.3 8.0 7.7 8.7 11.7 15.9 17.3 18.6 18.6 18.7 18.5 20.0 19.2 19.2 1 2.8 2.9 2.1 2.0 2.3 2.7 3.1 3.8 4.0 4.9 4.9 4.9 4.2 3.9 4.7 4.9 5.1 9.1 1.2 2.5 2.1 3.7 4.5 5.4 5.6 5.8 6.0 6.5 6.9 6.7 6.8 5 6.1 6.7 4.8 2.7 3.2 3.9 4.9 7.6 7.9 8.1 7.9 8.5 8.1 8.4 7.6 7.3 0 3.8 1.1 1.3 -1.6 -1.2 -2.6 2.8 3.0 3.3 3.0 3.3 3.1 4.4 2.2 2.3 -6 1.1 8.1 3 1.6 -2.0 3.3 -1.1 1.3 3.0 3.3 3.0 3.3 3.0 3.2 2.2 2.7 3.4 1.5 3.0 3.3 3.0 3.2 2.8 2.7 3.2 3.9 4.9 7.6 7.9 8.1 7.9 8.5 8.1 8.4 7.6 7.3 6.8 1.3 1.3 1.6 -2.0 3.3 -1.1 1.3 3.0 3.3 3.0 3.3 3.0 3.2 2.2 2.7 3.4 1.4 1.4 2.2 2.3 -6 1.1 8.1 3 1.6 -2.0 3.3 -1.1 1.3 3.0 3.3 3.0 3.3 3.0 3.2 2.2 2.7 3.4 2.4 2.2 2.3 -6 1.1 3.1 3.1 3.0 3.3 3.1 4.4 2.2 2.3 2.3 -6 1.1 3.1 3.1 3.0 3.3 3.0 3.3 3.0 3.0 3.0 3.0 3.0 3.0</th><th>8 66.5 61.3 53.2 52.3 52.8 58.9 67.8 69.1 66.6 66.8 66.8 63.5 61.6 62.4 65.1 64.5 62.0 6 5.8 5.1 3.2 2.6 2.7 3.2 5.0 6.4 6.2 7.0 8.1 7.0 7.4 8.0 7.9 8.4 8.0 8.36.7 34.9 31.4 31.9 31.7 35.4 40.8 41.0 40.0 38.5 37.3 35.9 33.6 32.8 33.7 32.8 31.7 42.0 21.3 18.6 17.8 18.4 20.3 22.0 21.7 20.4 21.3 21.4 20.6 20.6 21.6 23.5 23.3 22.3 1 16.6 19.6 35.6 37.7 42.0 30.9 15.2 11.7 11.9 13.0 13.0 15.5 17.8 17.7 17.9 17.6 17.5 7 10.1 14.2 31.3 33.6 37.7 26.1 9.1 4.8 4.5 5.3 5.4 8.1 10.4 10.2 9.8 9.2 8.9 4 2.3 2.0 1.5 1.4 1.5 1.7 2.4 2.9 3.1 3.1 3.1 3.0 3.0 3.0 3.0 2.8 3.0 3.1 3.5 1 2.0 13.0 10.3 8.0 7.7 8.7 11.7 15.9 17.3 18.6 18.6 18.7 18.5 20.0 19.2 19.2 22.1 1 2.8 2.9 2.1 2.0 2.3 2.7 3.1 3.8 4.0 4.9 4.9 4.9 4.2 3.9 4.7 4.9 5.1 5.1 5.1 12.1 12.8 2.7 3.2 3.9 4.9 7.6 7.9 8.1 7.9 8.5 8.1 8.4 7.6 7.3 8.5 1 8.1 1.3 1.3 1.3 1.3 1.4 1.4 2.2 2.3 2.3 2.4 1.8 2.5 1.3 1.3 1.3 1.6 2.0 3.3 2.1 1.3 3.0 3.3 3.3 3.0 3.1 1.3 3.5 3.5 1.1 1.3 1.6 2.0 3.3 2.1 1.3 3.0 3.3 3.0 3.1 1.3 3.5 3.5 3.1 3.1 3.1 3.1 3.1 3.1 3.1 3.1 3.1 3.1</th></th>	8       66.5       61.3       53.2       52.3       52.8       58.9       67.8       69.1       66.6         6       5.8       5.1       3.2       2.6       2.7       3.2       5.0       6.4       6.2         8       36.7       34.9       31.4       31.9       31.7       35.4       40.8       41.0       40.0         4       24.0       21.3       18.6       17.8       18.4       20.3       22.0       21.7       20.4         1       16.6       19.6       35.6       37.7       42.0       30.9       15.2       11.7       11.9         7       10.1       14.2       31.3       33.6       37.7       26.1       9.1       4.8       4.5         4       2.3       2.0       1.5       1.4       1.5       1.7       2.4       2.9       3.1         0       4.2       3.4       2.8       2.7       2.8       3.1       3.7       4.0       4.3         5       12.0       13.0       10.3       8.0       7.7       8.7       11.7       15.9       17.3         1       2.8       2.9       2.1       2.0       2.3	8       66.5       61.3       53.2       52.3       52.8       58.9       67.8       69.1       66.6       66.8         6       5.8       5.1       3.2       2.6       2.7       3.2       5.0       6.4       6.2       7.0         8       36.7       34.9       31.4       31.9       31.7       35.4       40.8       41.0       40.0       38.5         4       24.0       21.3       18.6       17.8       18.4       20.3       22.0       21.7       20.4       21.3         1       16.6       19.6       35.6       37.7       42.0       30.9       15.2       11.7       11.9       13.0         7       10.1       14.2       31.3       33.6       37.7       26.1       9.1       4.8       4.5       5.3         4       2.3       2.0       1.5       1.4       1.5       1.7       2.4       2.9       3.1       3.1         0       4.2       3.4       2.8       2.7       2.8       3.1       3.7       4.0       4.3       4.6         5       12.0       13.0       10.3       8.0       7.7       8.7       11.7       15.9 <th>8       66.5       61.3       53.2       52.3       52.8       58.9       67.8       69.1       66.6       66.8       66.8         6       5.8       5.1       3.2       2.6       2.7       3.2       5.0       6.4       6.2       7.0       8.1         8       36.7       34.9       31.4       31.9       31.7       35.4       40.8       41.0       40.0       38.5       37.3         4       24.0       21.3       18.6       17.8       18.4       20.3       22.0       21.7       20.4       21.3       21.4         1       16.6       19.6       35.6       37.7       42.0       30.9       15.2       11.7       11.9       13.0       13.0         7       10.1       14.2       31.3       33.6       37.7       26.1       9.1       4.8       4.5       5.3       5.4         4       2.3       2.0       1.5       1.4       1.5       1.7       2.4       2.9       3.1       3.1       3.0         0       4.2       3.4       2.8       2.7       2.8       3.1       3.7       4.0       4.3       4.6       4.6         5</th>	8       66.5       61.3       53.2       52.3       52.8       58.9       67.8       69.1       66.6       66.8       66.8         6       5.8       5.1       3.2       2.6       2.7       3.2       5.0       6.4       6.2       7.0       8.1         8       36.7       34.9       31.4       31.9       31.7       35.4       40.8       41.0       40.0       38.5       37.3         4       24.0       21.3       18.6       17.8       18.4       20.3       22.0       21.7       20.4       21.3       21.4         1       16.6       19.6       35.6       37.7       42.0       30.9       15.2       11.7       11.9       13.0       13.0         7       10.1       14.2       31.3       33.6       37.7       26.1       9.1       4.8       4.5       5.3       5.4         4       2.3       2.0       1.5       1.4       1.5       1.7       2.4       2.9       3.1       3.1       3.0         0       4.2       3.4       2.8       2.7       2.8       3.1       3.7       4.0       4.3       4.6       4.6         5	8       66.5       61.3       53.2       52.8       58.9       67.8       69.1       66.6       66.8       66.8       63.5         6       5.8       5.1       3.2       2.6       2.7       3.2       5.0       6.4       6.2       7.0       8.1       7.0         8       36.7       34.9       31.4       31.9       31.7       35.4       40.8       41.0       40.0       38.5       37.3       35.9         4       24.0       21.3       18.6       17.8       18.4       20.3       22.0       21.7       20.4       21.3       21.4       20.6         1       16.6       19.6       35.6       37.7       42.0       30.9       15.2       11.7       11.9       13.0       13.0       15.5         7       10.1       14.2       31.3       33.6       37.7       26.1       9.1       4.8       4.5       5.3       5.4       8.1         4       2.3       2.0       1.5       1.4       1.5       1.7       2.4       2.9       3.1       3.1       3.0       3.0         0       4.2       3.4       2.8       2.7       2.8       3.1       3.	8       66.5       61.3       53.2       52.3       52.8       58.9       67.8       69.1       66.6       66.8       66.8       63.5       61.6         6       5.8       5.1       3.2       2.6       2.7       3.2       5.0       6.4       6.2       7.0       8.1       7.0       7.4         8       36.7       34.9       31.4       31.9       31.7       35.4       40.8       41.0       40.0       38.5       37.3       35.9       33.6         4       24.0       21.3       18.6       17.8       18.4       20.3       22.0       21.7       20.4       21.3       21.4       20.6       20.6         1       16.6       19.6       35.6       37.7       42.0       30.9       15.2       11.7       11.9       13.0       13.0       15.5       17.8         7       10.1       14.2       31.3       33.6       37.7       26.1       9.1       4.8       4.5       5.3       5.4       8.1       10.4         4       2.3       2.0       1.5       1.4       1.5       1.7       2.4       2.9       3.1       3.1       3.0       3.0       3.0	8         66.5         61.3         53.2         52.3         52.8         58.9         67.8         69.1         66.6         66.8         66.8         63.5         61.6         62.4           6         5.8         5.1         3.2         2.6         2.7         3.2         5.0         6.4         6.2         7.0         8.1         7.0         7.4         8.0           8         36.7         34.9         31.4         31.9         31.7         35.4         40.8         41.0         40.0         38.5         37.3         35.9         33.6         32.8           4         24.0         21.3         18.6         17.8         18.4         20.3         22.0         21.7         20.4         21.3         21.4         20.6         20.6         21.6           1         16.6         19.6         35.6         37.7         42.0         30.9         15.2         11.7         11.9         13.0         13.0         15.5         17.8         17.7           7         10.1         14.2         31.3         33.6         37.7         26.1         9.1         4.8         4.5         5.3         5.4         8.1         10.4         10.2 <th>8       66.5       61.3       53.2       52.3       52.8       58.9       67.8       69.1       66.6       66.8       66.8       63.5       61.6       62.4       65.1         6       5.8       5.1       3.2       2.6       2.7       3.2       5.0       6.4       6.2       7.0       8.1       7.0       7.4       8.0       7.9         8       36.7       34.9       31.4       31.9       31.7       35.4       40.8       41.0       40.0       38.5       37.3       35.9       33.6       32.8       33.7         4       24.0       21.3       18.6       17.8       18.4       20.3       22.0       21.7       20.4       21.3       21.4       20.6       20.6       21.6       23.5         1       16.8       19.6       35.6       37.7       42.0       30.9       15.2       11.7       11.9       13.0       13.0       15.5       17.8       17.7       17.9         7       10.1       14.2       31.3       33.6       37.7       26.1       9.1       4.8       4.5       5.3       5.4       8.1       10.4       10.2       9.8         4       2.3&lt;</th> <th>8 66.5 61.3 53.2 52.3 52.8 58.9 67.8 69.1 66.6 66.8 66.8 63.5 61.6 62.4 65.1 64.5 65.8 5.1 3.2 2.6 2.7 3.2 5.0 6.4 6.2 7.0 8.1 7.0 7.4 8.0 7.9 8.4 8 36.7 34.9 31.4 31.9 31.7 35.4 40.8 41.0 40.0 38.5 37.3 35.9 33.6 32.8 33.7 32.8 4 24.0 21.3 18.6 17.8 18.4 20.3 22.0 21.7 20.4 21.3 21.4 20.6 20.6 21.6 23.5 23.3 1 16.6 19.6 35.6 37.7 42.0 30.9 15.2 11.7 11.9 13.0 13.0 15.5 17.8 17.7 17.9 17.6 7 10.1 14.2 31.3 33.6 37.7 26.1 9.1 4.8 4.5 5.3 5.4 8.1 10.4 10.2 9.8 9.2 4 2.3 2.0 1.5 1.4 1.5 1.7 2.4 2.9 3.1 3.1 3.1 3.0 3.0 3.0 2.8 3.0 3.1 0 4.2 3.4 2.8 2.7 2.8 3.1 3.7 4.0 4.3 4.6 4.6 4.4 4.4 4.7 5.1 5.3 5 12.0 13.0 10.3 8.0 7.7 8.7 11.7 15.9 17.3 18.6 18.6 18.7 18.5 20.0 19.2 19.2 1 2.8 2.9 2.1 2.0 2.3 2.7 3.1 3.8 4.0 4.9 4.9 4.9 4.2 3.9 4.7 4.9 5.1 9.1 1.2 2.5 2.1 3.7 4.5 5.4 5.6 5.8 6.0 6.5 6.9 6.7 6.8 5 6.1 6.7 4.8 2.7 3.2 3.9 4.9 7.6 7.9 8.1 7.9 8.5 8.1 8.4 7.6 7.3 0 3.8 1.1 1.3 -1.6 -1.2 -2.6 2.8 3.0 3.3 3.0 3.3 3.1 4.4 2.2 2.3 -6 1.1 8.1 3 1.6 -2.0 3.3 -1.1 1.3 3.0 3.3 3.0 3.3 3.0 3.2 2.2 2.7 3.4 1.5 3.0 3.3 3.0 3.2 2.8 2.7 3.2 3.9 4.9 7.6 7.9 8.1 7.9 8.5 8.1 8.4 7.6 7.3 6.8 1.3 1.3 1.6 -2.0 3.3 -1.1 1.3 3.0 3.3 3.0 3.3 3.0 3.2 2.2 2.7 3.4 1.4 1.4 2.2 2.3 -6 1.1 8.1 3 1.6 -2.0 3.3 -1.1 1.3 3.0 3.3 3.0 3.3 3.0 3.2 2.2 2.7 3.4 2.4 2.2 2.3 -6 1.1 3.1 3.1 3.0 3.3 3.1 4.4 2.2 2.3 2.3 -6 1.1 3.1 3.1 3.0 3.3 3.0 3.3 3.0 3.0 3.0 3.0 3.0 3.0</th> <th>8 66.5 61.3 53.2 52.3 52.8 58.9 67.8 69.1 66.6 66.8 66.8 63.5 61.6 62.4 65.1 64.5 62.0 6 5.8 5.1 3.2 2.6 2.7 3.2 5.0 6.4 6.2 7.0 8.1 7.0 7.4 8.0 7.9 8.4 8.0 8.36.7 34.9 31.4 31.9 31.7 35.4 40.8 41.0 40.0 38.5 37.3 35.9 33.6 32.8 33.7 32.8 31.7 42.0 21.3 18.6 17.8 18.4 20.3 22.0 21.7 20.4 21.3 21.4 20.6 20.6 21.6 23.5 23.3 22.3 1 16.6 19.6 35.6 37.7 42.0 30.9 15.2 11.7 11.9 13.0 13.0 15.5 17.8 17.7 17.9 17.6 17.5 7 10.1 14.2 31.3 33.6 37.7 26.1 9.1 4.8 4.5 5.3 5.4 8.1 10.4 10.2 9.8 9.2 8.9 4 2.3 2.0 1.5 1.4 1.5 1.7 2.4 2.9 3.1 3.1 3.1 3.0 3.0 3.0 3.0 2.8 3.0 3.1 3.5 1 2.0 13.0 10.3 8.0 7.7 8.7 11.7 15.9 17.3 18.6 18.6 18.7 18.5 20.0 19.2 19.2 22.1 1 2.8 2.9 2.1 2.0 2.3 2.7 3.1 3.8 4.0 4.9 4.9 4.9 4.2 3.9 4.7 4.9 5.1 5.1 5.1 12.1 12.8 2.7 3.2 3.9 4.9 7.6 7.9 8.1 7.9 8.5 8.1 8.4 7.6 7.3 8.5 1 8.1 1.3 1.3 1.3 1.3 1.4 1.4 2.2 2.3 2.3 2.4 1.8 2.5 1.3 1.3 1.3 1.6 2.0 3.3 2.1 1.3 3.0 3.3 3.3 3.0 3.1 1.3 3.5 3.5 1.1 1.3 1.6 2.0 3.3 2.1 1.3 3.0 3.3 3.0 3.1 1.3 3.5 3.5 3.1 3.1 3.1 3.1 3.1 3.1 3.1 3.1 3.1 3.1</th>	8       66.5       61.3       53.2       52.3       52.8       58.9       67.8       69.1       66.6       66.8       66.8       63.5       61.6       62.4       65.1         6       5.8       5.1       3.2       2.6       2.7       3.2       5.0       6.4       6.2       7.0       8.1       7.0       7.4       8.0       7.9         8       36.7       34.9       31.4       31.9       31.7       35.4       40.8       41.0       40.0       38.5       37.3       35.9       33.6       32.8       33.7         4       24.0       21.3       18.6       17.8       18.4       20.3       22.0       21.7       20.4       21.3       21.4       20.6       20.6       21.6       23.5         1       16.8       19.6       35.6       37.7       42.0       30.9       15.2       11.7       11.9       13.0       13.0       15.5       17.8       17.7       17.9         7       10.1       14.2       31.3       33.6       37.7       26.1       9.1       4.8       4.5       5.3       5.4       8.1       10.4       10.2       9.8         4       2.3<	8 66.5 61.3 53.2 52.3 52.8 58.9 67.8 69.1 66.6 66.8 66.8 63.5 61.6 62.4 65.1 64.5 65.8 5.1 3.2 2.6 2.7 3.2 5.0 6.4 6.2 7.0 8.1 7.0 7.4 8.0 7.9 8.4 8 36.7 34.9 31.4 31.9 31.7 35.4 40.8 41.0 40.0 38.5 37.3 35.9 33.6 32.8 33.7 32.8 4 24.0 21.3 18.6 17.8 18.4 20.3 22.0 21.7 20.4 21.3 21.4 20.6 20.6 21.6 23.5 23.3 1 16.6 19.6 35.6 37.7 42.0 30.9 15.2 11.7 11.9 13.0 13.0 15.5 17.8 17.7 17.9 17.6 7 10.1 14.2 31.3 33.6 37.7 26.1 9.1 4.8 4.5 5.3 5.4 8.1 10.4 10.2 9.8 9.2 4 2.3 2.0 1.5 1.4 1.5 1.7 2.4 2.9 3.1 3.1 3.1 3.0 3.0 3.0 2.8 3.0 3.1 0 4.2 3.4 2.8 2.7 2.8 3.1 3.7 4.0 4.3 4.6 4.6 4.4 4.4 4.7 5.1 5.3 5 12.0 13.0 10.3 8.0 7.7 8.7 11.7 15.9 17.3 18.6 18.6 18.7 18.5 20.0 19.2 19.2 1 2.8 2.9 2.1 2.0 2.3 2.7 3.1 3.8 4.0 4.9 4.9 4.9 4.2 3.9 4.7 4.9 5.1 9.1 1.2 2.5 2.1 3.7 4.5 5.4 5.6 5.8 6.0 6.5 6.9 6.7 6.8 5 6.1 6.7 4.8 2.7 3.2 3.9 4.9 7.6 7.9 8.1 7.9 8.5 8.1 8.4 7.6 7.3 0 3.8 1.1 1.3 -1.6 -1.2 -2.6 2.8 3.0 3.3 3.0 3.3 3.1 4.4 2.2 2.3 -6 1.1 8.1 3 1.6 -2.0 3.3 -1.1 1.3 3.0 3.3 3.0 3.3 3.0 3.2 2.2 2.7 3.4 1.5 3.0 3.3 3.0 3.2 2.8 2.7 3.2 3.9 4.9 7.6 7.9 8.1 7.9 8.5 8.1 8.4 7.6 7.3 6.8 1.3 1.3 1.6 -2.0 3.3 -1.1 1.3 3.0 3.3 3.0 3.3 3.0 3.2 2.2 2.7 3.4 1.4 1.4 2.2 2.3 -6 1.1 8.1 3 1.6 -2.0 3.3 -1.1 1.3 3.0 3.3 3.0 3.3 3.0 3.2 2.2 2.7 3.4 2.4 2.2 2.3 -6 1.1 3.1 3.1 3.0 3.3 3.1 4.4 2.2 2.3 2.3 -6 1.1 3.1 3.1 3.0 3.3 3.0 3.3 3.0 3.0 3.0 3.0 3.0 3.0	8 66.5 61.3 53.2 52.3 52.8 58.9 67.8 69.1 66.6 66.8 66.8 63.5 61.6 62.4 65.1 64.5 62.0 6 5.8 5.1 3.2 2.6 2.7 3.2 5.0 6.4 6.2 7.0 8.1 7.0 7.4 8.0 7.9 8.4 8.0 8.36.7 34.9 31.4 31.9 31.7 35.4 40.8 41.0 40.0 38.5 37.3 35.9 33.6 32.8 33.7 32.8 31.7 42.0 21.3 18.6 17.8 18.4 20.3 22.0 21.7 20.4 21.3 21.4 20.6 20.6 21.6 23.5 23.3 22.3 1 16.6 19.6 35.6 37.7 42.0 30.9 15.2 11.7 11.9 13.0 13.0 15.5 17.8 17.7 17.9 17.6 17.5 7 10.1 14.2 31.3 33.6 37.7 26.1 9.1 4.8 4.5 5.3 5.4 8.1 10.4 10.2 9.8 9.2 8.9 4 2.3 2.0 1.5 1.4 1.5 1.7 2.4 2.9 3.1 3.1 3.1 3.0 3.0 3.0 3.0 2.8 3.0 3.1 3.5 1 2.0 13.0 10.3 8.0 7.7 8.7 11.7 15.9 17.3 18.6 18.6 18.7 18.5 20.0 19.2 19.2 22.1 1 2.8 2.9 2.1 2.0 2.3 2.7 3.1 3.8 4.0 4.9 4.9 4.9 4.2 3.9 4.7 4.9 5.1 5.1 5.1 12.1 12.8 2.7 3.2 3.9 4.9 7.6 7.9 8.1 7.9 8.5 8.1 8.4 7.6 7.3 8.5 1 8.1 1.3 1.3 1.3 1.3 1.4 1.4 2.2 2.3 2.3 2.4 1.8 2.5 1.3 1.3 1.3 1.6 2.0 3.3 2.1 1.3 3.0 3.3 3.3 3.0 3.1 1.3 3.5 3.5 1.1 1.3 1.6 2.0 3.3 2.1 1.3 3.0 3.3 3.0 3.1 1.3 3.5 3.5 3.1 3.1 3.1 3.1 3.1 3.1 3.1 3.1 3.1 3.1

### Percentage Distribution of National Income by Distributive Shares, 1926-1956

1	939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
	61.4	58.5	57.2	52.9	54.7	52.1	52.1	57.4	61.8	61.7	62.0	60.8	60.9	60.1	62.8	65.4	63.9	63.8	1
	. 8	3.8	6.1	7.9	10.3	11.1	11.6	3.6	.8	.7	.9	1.0	1.2	1.4	1.6	1.9	1.9	1.8	2
	12.3	13.2	15.1	14.0	12.8	11.3	11.4	13.3	15.1	14.3	12.1	15.0	14.8	12.7	11.9	10.3	12.0	12.2	3
	7.1	6.9	6.6	6.6	6.5	6.1	6.4	6.1	5.7	5.4	5.4	6.3	6.1	6.3	6.9	7.9	8.4	8.5	4
									10.8	11.5	9.7	9.3	11.7	10.5	8.2	5.3	6.1	6.4	5
	8.5	9.5	7.4	11.5	8.2	11.4	9.4	11.1	10.0	11.5	3.1	3.0	****	10.0	0.2				
	11.2	10.5	10.1	8.6	8.5	8.5	9.5	11.2	11.3	10.6	10.8	10.2	9.2	8.4	8.7	8.7	8.7	8.4	6
١.	1.3	- 2.4	- 2.5	- 1.5	- 1.0	5	4	- 2.7	- 5.5	- 4.2	9	- 2.6	- 3.9	.6	1	. 5	- 1.0	- 1.1	7
1	00.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	8

# Percentage Distribution of Gross Domestic Product at Factor Cost, by industry, 1926-1956

No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
and the same														
1	Agriculture	18.1	17.0	16.5	12.3	11.6	8.0	9.4	8.8	10.6	11.1	9.7	10.3	11.5
2	Forestry	1.3	1.3	1.3	1.4	1.1	. 9	.8	1.0	1.1	1.1	1.3	1.7	1.1
3	Fishing and trapping	. 8	.8	.7	.7	.6	. 5	. 5	. 5	. 6	.6	.6	. 5	. 5
4	Mining, quarrying, and oil wells	3.2	3.2	3,3	3.8	3.4	3.3	3, 1	4.2	5.2	5.6	6.5	7.0	6.2
5	Manufacturing	21.7	22.1	22.3	23.6	23.1	22.4	20.9	20.8	22.3	23.0	23.7	24.9	24.1
6	Construction	4.1	4.1	4.3	5.1	4.7	4.8	3.2	2.3	2.3	2.6	2.8	3.3	3.2
3	Transportation	)												
8	Storage	12.9	12.8	13.1	12.9	12.4	13.2	13.6	14.0	13.9	13.3	13.3	12.6	12.3
9	Communication	12.0	12.0	10, 1			2012							
10	Electric power, gas, and water utilities	}												
11	Wholesale trade	3.5	3.8	3.6	3.6	5.1	4.5	4.7	4.3	4.0	4.1	4.1	3.9	4.4
12	Retail trade	8.1	8.5	8.8	9.1	9.6	10.0	9.4	8.8	8.7	9.0	9.3	9.0	9.3
13	Finance, insurance, and real estate	10.0	10.2	9.1	10.6	10.5	11.9	13.1	14.2	11.7	11.0	10.9	9.8	10.0
14	Public administration and defence	3,4	3.4	3.4	3.6	4.1	5.2	5.9	5.9	5.8	5.4	5.1	4.8	5.1
15	Service	12.9	12.8	13.6	13.3	13.8	15.3	15.4	15.2	13.8	13.2	12.7	12.2	12.3
16	Total	100.0	100.0	100.0	100.0	100, 6	100.0	100.0	100.0	100. 6	100,0	100.0	100.0	100.0

## Percentage Distribution of Personal Income by Source, 1926-1956

No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
1	Wages, salaries, and supplementary labour income	58.5	58.7	59.2	63.2	63.6	65.9	64.7	63.3	61.0	61.3	62.4	62.5	61.0
2	Military pay and allowances	. 2	. 2	. 2	. 2	. 2	. 2	. 3	. 3	. 3	. 3	.3	. 2	. 2
3	Net income received by farm operators from farm production	14.9	14.3	13.6	8.5	7.8	3.2	3.8	3,4	6.0	6.6	6.4	7.2	8.6
4	Net income of non-farm unincorporated business	12.2	12.6	12.8	13.4	12.4	11.6	10.6	10.1	10.1	10.7	11.2	11.1	11.3
5	Interest, dividends, and net rental income of persons	12.3	12.3	12.2	12.6	13.3	15.1	15.2	16.3	15,5	14.4	13.3	13.0	13, 2
6	Transfer payments (excluding interest)	1.9	1.9	2.0	2.1	2.7	4.0	5.4	6.6	7.1	6.7	6.4	6.0	5.7
7	Total	100.0	100. 0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

# Selected Per Person Income and Product Series in Current and Constant (1949) Dollars, 1926-1956

No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
	Current dollars													
1	Gross National Product	545	576	615	612	561	453	364	330	371	398	4 25	476	473
2	Personal income	425	439	463	459	425	348	287	262	292	309	324	363	365
3	Personal disposable income	419	433	457	453	418	342	281	256	286	301	315	353	354
4	Personal expenditure on consumer goods and services	375	404	439	461	428	364	304	281	296	308	324	352	349
	Constant (1949) dollars													
5	Gross National Product	802	858	919	903	850	729	647	598	664	708	733	799	795
6	Personal expenditure on consumer goods and services	530	579	623	647	608	566	515	496	515	533	551	581	568

# Percentage Distribution of Gross Domestic Product at Factor Cost, by Industry, 1926-1956

-					_													
939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
11.1	11.4	9.2	12.4	9.6	12.4	10.7	12.3	12.0	12.5	10.7	10.4	12.5	11.4	9.2	6.7	7.2	7.3	1
1.5	1.6	1.5	1.4	1.5	1.5	1.9	2.5	2.4	2.1	1.7	2.1	2.3	1.7	1.7	1.8	1.8	1.9	2
.5	. 5	. 6	. 5	.6	. 6	.7	.7	. 5	.6	. 5	.6	. 5	.4	.4	.4	. 3	. 3	3
6.5	6.0	5.3	4.1	3.6	2.9	3.0	3.4	3.8	3.8	3.7	4.0	4.2	3.6	3.5	4.0	4.4	4.5	4
24.7	26.7	29.9	30.9	31.8	29.4	27, 5	26.1	27.9	28.5	29.0	28.7	28.6	28.9	29.0	28.3	28.0	28.0	5
3.0	3.1	3.5	3.3	3.0	2.3	2.9	4.1	4.7	5.0	5.4	5, 3	4.8	5.3	6.1	6.0	5.7	6.0	6
					8.0	8.1	8.0	7.7	7.4	6.8	6.8	7.1	6.8	7.0	6.7	7.0	7.2	7
12.6	11.9	12.1	11.5	12.1	.3	. 3	.3	. 2	. 3	.2	.2	, 3	.3	.3	.3	.3	. 3	8
					1.3	1.4	1.6	1.6	1.5	1.5	1.6	1.6	1.6	1.7	1.9	1.9	1.9	9
					2.1	2.0	2.1	2.3	2.2	2,3	2.4	2.3	2.3	2.4	2.7	2.5	2.4	10
4.0	3.9	3.9	3.3	3.1	3.5	3.6	4.4	5, 1	4.5	4.8	4.7	4.4	4.9	4.5	4.5	4.4	4.5	11
8.7	8.0	7.8	6.9	7.0	7.3	8.1	9.6	9.4	8.9	9.7	9.3	8.1	9.0	9.1	9.3	9.3	9.0	12
10.3	8.9	7.7	7.1	6.8	6.7	6.8	7.5	6.9	7.3	7.7	8.2	7.8	8.1	8.6	9.5	9.7	9.7	13
5.2	7.3	8.7	10.2	12.5	13.4	14.0	7.2	4.7	4.6	5.0	4.9	5.2	5.6	5.9	6.7	6.6	6.4	14
11.9	10.7	9.8	8.4	8.4	8.3	9.0	10.2	10.8	10.8	11.0	10.8	10.3	10.1	10.6	11.2	10.9	10.6	15
00.0	100. 6	100.0	100, 6	100.0	100. 6	100, 0	100. 0	100. 0	100. 0	100, 6	100, 6	100.0	100. 6	100.0	100.0	100.0	100.0	16

# Percentage Distribution of Personal Income by Source, 1926-1956

939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
£59.8		60.5	56.4	58.2	54.9	53.7	55.0	59.9	60.4	61.4	62.4	61.7	62.3	63.8	65.2	64.4	64.8	1
.7	3.9	6.6	8.7	11.3	12.0	12.2	3,5	.8	.7	.9	1.0	1.3	1.6	1.7	2.0	2.0	1.9	2
9.6	9.2	7.9	13.2	9.6	12.5	9.2	10.6	10.5	12.4	10.8	8.6	12.3	11.0	8.7	5.5	6.0	6.6	3
,11,1	10.8	10.9	9.5	9.3	9.2	10.1	11.0	11.3	10.7	11.0	10.7	9.6	9.0	9.2	9.0	9.1	8.8	4
1.13,3	12.3	10.6	9.1	8.8	8.4	8.7	8.4	9.2	8.4	8.2	9.4	8.4	8,1	8.5	9.3	9.6	9.7	5
5.5	4.4	3.5	3.1	2.8	3.0	6.1	11.5	8.3	7.4	7.7	7.9	6.7	8.0	8.1	9.0	8.9	8.2	6
00.0	100. 6	100.0	100.0	100, 0	100.0	100. 0	100. 0	100. 0	100. 0	100.0	100, 0	100.0	100. 0	100.0	100. 6	100.0	100. 0	7

## Selected Per Person Income and Product Series in Current and Constant (1949) Dollars, 1926-1956

11-																		
1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
500	592	724	886	940	992	980	964	1,049	1,179	1,215	1,313	1,511	1,660	1,685	1,627	1,724	1,872	1
381	432	508	634	682	742	755	791	827	928	940	979	1,130	1,203	1,235	1,205	1,263	1,365	2
371	420	483	592	623	672	688	726	764	864	881	925	1,056	1,112	1,139	1,111	1,168	1,259	3
354	394	443	472	492	525	577	653	724	786	812	877	961	1,022	1,050	1,058	1,112	1,163	4
846	959	1,085	1,271	1,302	1,333	1,288	1, 241	1,231	1,227	1,215	1,274	1,324	1,385	1,401	1,320	1,399	1,464	5
578	618	649	660	670	707	768	840	849	815	812	849	844	874	898	893	939	965	6



# Part I TABLES

# Section A INCOME AND EXPENDITURE ACCOUNTS

1. Summary Tables

TABLE 1. National Income and Gross National Product, 1926-19561

71-		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
No.							()	millions	of dolla	rs)					
							1		1		1		1	1	-
1	Wages, Salaries, and Supplementary Labour	2, 366	2, 506	2,715	2,940	2, 786	2,408	1,975	1,788	1, 939	2,079	2, 241	2, 538	2, 515	2, 601
.,.	Military Pay and Allowances	7	7	7	8	8	8	8	В	8	9	9	9	9	32
3 '	Corporation Profits before Taxes 2	325	368	433	396	144	13	- 98	73	191	237	314	432	334	521
4	Rent, Interest, and Miscellaneous Invest- ment Income	287	314	360	369	339	269	223	173	202	219	242	270	262	301
5	Accrued Net Income of Farm Operators from Farm Production 3	609	600	636	392	343	94	104	66	167	218	199	280	353	362
6	Net Income of Non-Farm Unincorporated Business 4	489	532	585	618	540	418	320	282	315	357	398	445	461	475
7	Inventory Valuation Adjustment <sup>5</sup>	46	29	1	- 15	239	172	109	- 22	- 39	- 20	- 36	- 87	67	- 56
	Net National Income at Factor Cost	4,129	4, 356	4, 737	4, 708	4, 399	3, 382	2, 641	2,368	2, 783	3,099	3, 367	3, 887	4, 001	4, 236
9	Indirect Taxes less Subsidies	612	634	679	681	593	557	537	537	578	585	660	705	639	734
10	Capital Consumption Allowances and Miscellaneous Valuation Adjustments	567	611	671	717	711	646	576	528	522	531	555	594	604	637
11	Residual Error of Estimate	-156	- 52	- 41	28	25	114	73	77	101	100	71	71	34	29
12	Gross National Product at Market Prices	5, 152	5, 549	6, 046	6, 134	5, 728	4, 699	3, 827	3, 510	3, 984	4, 315	4, 653	5,257	5, 278	5, 636

#### Footnotes

1. From 1949 on, Newfoundland has been included throughout this publication.
2. Excludes dividends paid to non-residents.
3. Includes changes in farm inventories as follows:

1927 63 1 1928 24 1 1929128 1	933 · 33 934 7	1938 35 1939 54	1943118 1944128 1945239	1948 33	1952
-------------------------------------	-------------------	--------------------	-------------------------------	---------	------

An adjustment has been made to take account of the accrued earnings of farm operators arising out of the operations of the Canadian Wheat Board and the Canadian Co-Operative Wheat Producers. (See footnote 5, Table 52).
4. Includes net income of independent professional practitioners.
5. See footnote 5, Table 2.

TABLE 2. Gross National Expenditure, 1926-1956

No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
							(	millions	of dolla	rs)					
1	Personal Expenditure on Consumer Goods and Services	3,542	3, 893	4,314	4, 621	4, 367	3, 773	3, 194	2, 984	3, 182	3, 338	3, 549	3, 884	3, 897	3, 984
2	Government Expenditure on Goods and Services 1	488	531	560	640	721	688	584	462	503	542	544	619	666	683
3	Current Expenditure <sup>2</sup>														
4	Gross Fixed Capital Formation 3														
5	Business Gross Fixed Capital Formation <sup>4</sup>	702	830	1,007	1,161	926	622	319	234	298	369	458	633	592	592
6	New Residential Construction	201	204	220	230	191	158	90	72	92	107	131	164	148	174
7	New Non-Residential Construction	240	299	413	490	384	265	121	78	91	116	148	188	170	164
8	New Machinery and Equipment	261	327	374	441	351	199	108	84	115	146	179	281	274	254
9	Value of Physical Change in Inventories 5	135	253	159	52	77	- 95	-100	- 91	32	39	- 72	9	57	282
10	Non-Farm Business Inventories	154	163	126	146	41	- 54	-127	- 68	19	34	68	113	- 21	101
11	Farm Inventories and Grain in Commercial Channels	- 19	90	33	- 94	36	- 41	27	- 23	13	5	- 140	- 104	78	181
12	Exports of Goods and Services 6	1,650	1,618	1,773	1,632	1, 286	967	804	826	1,018	1, 143	1,428	1,591	1,356	1, 451
13	Deduct. Imports of Goods and Services	-1,522	-1,629	-1,808	-1,945	-1,625	-1, 142	- 901	- 828	-948	-1,017	-1, 183	-1,409	1,257	-1,328
14	Residual Error of Estimate	157	53	41	- 27	- 24	- 114	- 73	- 77	-101	- 99	71	- 70	- 33	- 28
15	Gross National Expenditure at Market Prices	5, 152	5, 549	6, 046	6, 134	5, 728	4, 699	3, 827	3, 510	3, 984	4, 315	4, 653	5, 257	5, 278	5, 636

Footnotes:

1. Includes defence expenditure which is shown in footnote 2, Table 37.

2. Also includes net purchases of government commodity agencies and the defence production revolving fund. Excludes shipments of previously produced military equipment to NATO countries but includes replacements of new equipment.

3. Includes outlay on new durable assets such as building and highway construction by governments, other than government business enterprises (for detail see Table 43, footnote 2, and Table 54, lines 2, 3, and 4).

4. Includes capital expenditures by private and government business enterprises, private non-commercial institutions, and outlays on new residential construction by individuals and business investors. Total 'Private and Public Investment in Canada' can be obtained by adding lines 4 and 5.

5. The book value of inventories is deflated to remove the effect of price changes and the derived "physical" change is then valued at average prices of the current period to obtain the value of physical change. The difference between this value of physical change in book value is called the inventory valuation adjustment (see line 7, Table 1).

6. Excludes UNRRA, mutual aid, military relief and shipments of military equipment to NATO countries under the Defence Appropriation Act. See also Table 55.

TABLE 1. National Income and Gross National Product, 1926-19561

1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
							(m	illions of	dollars)		-						
2, 959	3, 608	4, 282	4, 812	4, 998	5, 037	5,487	6, 399	7,414	8,000	8,629	10, 103	11, 208	12,110	12, 432	13, 215	14,719	1
193	386	641	910	1,068	1,117	340	83	82	115	137	201	270	309	367	394	424	2
667	951	1,135	1,125	1,081	1,106	1, 269	1,566	1,715	1,562	2,118	2,455	2,364	2, 294	1,963	2, 489	2,802	3
351	416	532	571	589	618	581	591	651	703	890	1,020	1, 175	1,329	1, 511	1, 748	1,964	4
483	463	929	720	1,088	906	1,056	1, 120	1,378	1, 248	1,322	1,933	1,959	1,575	1,017	1, 261	1,468	5
531	637	701	747	811	918	1,072	1, 173	1,269	1,389	1,439	1,519	1,572	1, 688	1,656	1, 793	1,937	6
- 121	-156	-122	- 83	- 52	- 37	- 254	- 571	- 506	-112	- 374	- 643	106	-11	86	-217	-260	7
5, 063	6, 305	8, 098	8, 802	9, 583	9, 665	9, 551	10, 361	12, 003	12, 905	14, 161	16, 588	18, 654	19, 294	19, 032	20, 683	23, 054	8
831	1,055	1.086	1, 118	1, 112	1,004	1, 270	1,608	1,765	1,808	2, 000	2, 469	2,717	2,911	2, 947	3, 238	3,601	9
750	893	1,043	1,037	1,005	968	998	1, 223	1, 441	1,673	1,913	2, 203	2, 422	2,673	2,905	3, 163	3, 492	10
99	75	100	131	150	198	31	- 27	- 89	- 43	- 68	- 90	202	142	-13	- 14	- 49	11
3, 743	8, 328	10, 327	11, 088	11, 850	11,835	11,850	13, 165	15, 120	16, 343	18,096	21, 170	22, 995	25, 320	24, 371	27, 070	30, 098	12

- 1. For industrial and geographical distributions, see Tables 22 and 31 respectively.
- 3. For industrial distribution, see Table 27; for analysis of corporation profits, see Table 50.
- 4. See also Investment Income Appropriation Account, Tables 15 and 16, and the industrial distribution of investment income, Table 23.
- 5. For reconciliation with "Net Income of Farm Operators from Farming Operations" published by the Agriculture Division, D.B.S., see Table 52; for geographical distribution, see Table 32.
- 6. For industrial and geographical distribution, see Tables 24 and 33 respectively.
- 8. For reconciliation with other aggregates, see Table 3; for sector accounts consolidation, see Table 19.
- 9. For details by levels of government, see Tables 36 and 37; for details of indirect taxes, see Table 40; for details of subsidies, see Table 45.
- 10. For classifications by "form of organization", see Table 51.
- 12. For sector accounts consolidation, see Table 19; for reconciliation with Gross Domestic Product at factor cost, see Table 4.

TABLE 2. Gross National Expenditure, 1926-1956

N.																		
1	940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1955	No.
ı								(mi	llions of	dollars)								
L	1															1		
il.	488	5, 103	5, 500	5, 808	6, 274	6, 969	8,031	9,090	10,085	10,923	12,026	13, 460	14, 781	15, 592	16, 175	17, 464	18, 697	1
I																		
1	116	1,635	3,674	4,177	4,978	3, 656	1,796	1, 541	1,797	2, 127	2, 344	3, 271	4,279	4,432	4, 461	4, 780	5, 266	2
н										1,620	1, 756	2, 491	3, 239	3, 454	3, 519	3, 746	4,004	3
										507	588	780	1, 040	978	942	1,034	1, 262	4
, 1	803	1,085	1,064	887	900	1,031	1,388	2,085	2,619	3,032	3,348	3,959	4, 451	4,998	4, 779	5, 210	6, 629	5
	186	240	214	220	267	318	368	494	609	794	883	895	933	1,166	1, 227	1,378	1,526	6
	208	287	354	364	256	253	435	597	816	920	1,042	1, 270	1, 566	1,719	1, 671	1, 848	2, 550	7
1	409	558	496	303	377	460	585	994	1,194	1,318	1, 423	1, 794	1, 952	2, 113	1,881	1, 984	2, 553	8
1	255	88	135	- 180	- 145	- 311	333	403	113	49	550	914	512	583	- 130	281	815	9
	87	130	- 202	28	- 10	148	360	437	85	150	399	564	90	351	- 40	102	545	10
141																		
1	168	- 42	337	- 208	- 135	- 459	- 27	- 34	28	- 101	151	350	422	232	- 90	179	270	11
	808	2, 467	2, 361	3, 444	3,561	3,597	3,210	3, 640	4,050	4,021	4, 183	5,089	5, 573	5, 400	5, 147	5, 764	6, 339	12
20	629	-1,976	- 2, 307	-2,917	-3,569	- 2,910	-2,877	- 3, 621	-3,633	-3,853	-4,513	- 5, 613	-5, 400	-5,843	- 5, 574	-6,443	-7,697	13
214	98	- 74	- 100	- 131	- 149	- 197	- 31	27	89	44	68	90	- 201	- 142	13	14	49	14
501	743	8, 328	10, 327	11,088	11,850	11, 835	11,850	13, 165	15, 120	16, 343	18, 006	21, 170	23, 995	25, 020	24, 871	27, 070	30, 098	15
36	143	0, 348	10, 341	11,000	11, 600	11,000	11,000	20, 200	20,200	20,020	20,000	, 210	20,000	20,020	,			

- For details of expenditure on commodities and services, and imputed expenditure out of income in kind, see Tables 47 and 49 respectively.
   For total government expenditures relating to the National Accounts (excluding inter governmental transfers) see Table 10, for total government expenditures by level of government, see Table 37, for detail of government expenditure on goods and services, see Table 43, for imputed expenditure, see Table 49.
   For detail, see Table 54.
- For reconciliation with figures published by the Department of Trade and Commerce in Private and Public Investment in Canada, Outlook 1957 and prior publications, see Table 54; for industrial distribution, see Table 25; for National Saving Account, see Tables 17 and 18.
   For industrial distribution, see Table 26.
   and 13. For reconciliation with figures published by the Balance of Payments Section, D.B.S. in reports on The Canadian Balance of International payments, see Table 55; see also Non-Residents' Account, Tables 13 and 14.

TABLE 3. Relation between Net National Income at Factor Cost, Personal Income, Personal Disposable Income, and Personal Net Saving, 1926-1956

										,		1			
No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
140.					L		(n	illions	of dollar	s)					
					1	1	1						1		
1	Net National Income at Factor Cost	4, 129	4, 356	4, 737	4, 708	4, 399	3, 382	2, 641	2,368	2, 783	3, 099	3, 367	3, 887	4, 001	4, 23
2	Add - Transfer Payments (excluding interest on the public debt and charitable contributions from corporations) <sup>1</sup>	74	77	87	93	112	141	160	181	220	221	224	237	226	22
3	Add Interest on the Public Debt1	231	234	231	235	244	253	275	283	284	280	277	273	266	27
4	Deduct - Earnings Not Paid Out to Persons 2	- 420	- 433	- 501	- 428	- 417	- 161	- 61	- 42	- 153	- 252	- 321	- 390	- 425	- 45
5	Equals – Personal Income	4,014	4, 234	4, 554	4, 608	4, 338	3, 615	3,015	2, 790	3, 134	3, 348	3, 547	4,007	4, 068	4, 29
6	Deduct-Personal Direct Taxes	- 53	- 59	- 59	- 68	- 71	- 63	- 64	- 69	- 64	- 80	- 95	- 112	- 115	- 11
7	Equals - Personal Disposable accome	3, 961	4, 175	4, 495	4, 540	4, 267	3, 552	2, 951	2, 721	3,070	3, 268	3, 452	3, 895	3, 953	4, 17
8	Deduct-Personal Expenditure on Consumer Goods and Services	- 3, 542	- 3, 893	- 4, 314	- 4, 621	- 4, 367	- 3, 773	- 3, 194	- 2, 984	-3,182	- 3, 338	- 3, 549	- 3, 884	- 3, 897	- 3, 98
9	Equals Personal Net Saving	419	282	181	- 81	- 100	- 221	- 243	- 263	- 112	- 70	- 97	11	56	19
10	Value of Physical Change in Farm Inventories	2	63	- 24	- 128	84	- 19	20	- 33	- 7	4	- 43	- 11	35	5
11	Personal Saving excluding Change in Farm Inventories	417	219	205	47	- 184	- 202	- 263	- 230	- 105	- 74	- 54	22	21	14

TABLE 4. Relation between Gross National Product at Market Prices and Gross Domestic Product at Factor Cost, 1926-1956

-											100 40 8				
No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
							(1	millions	of dolla	rs)					
1	Gross National Product at Market Prices	5, 152	5, 549	6, 046	6, 134	5, 728	4, 699	3, 827	3, 510	3, 984	4, 315	4, 653	5, 257	5, 278	5, 63
2	Deduct: Residual Error of Estimate	156	52	41	- 28	- 25	- 114	- 73	- 77	- 101	- 100	- 71	- 71	- 34	- 2
3	Indirect Taxes less Subsidies	- 612	- 634	- 679	- 681	- 593	- 557	- 537	- 537	- 578	- 585	- 660	- 705	- 639	- 73
4	Income Received from Non-Residents	- 32	- 41	- 46	- 61	- 59	- 48	- 37	- 38	- 57	- 64	- 75	- 76	- 66	- 5
5	Add: Income Paid to Non-Residents	240	257	275	322	348	330	302	264	268	270	311	302	307	30
6	Gross Domestic Product at Factor Cost	4, 904	5, 183	5, 637	5, 686	5, 399	4, 310	3, 482	3, 122	3, 516	3, 836	4, 158	4, 707	4, 846	5, 12

Footnotes:
1. Since National Income excludes transfer payments and personal income includes them, items 2 and 3 are added back here. However, charitable contributions from corporations are not added since they are included in National Income.

<sup>2.</sup> This item includes: undistributed corporation profits, corporation profits taxes, withholding taxes, government investment income, adjustment on graitransactions, inventory valuation adjustment, and employer and employee contributions to social insurance and government pension funds.

Cross references:
Line 4. For detail, see Table 14.
'' 5. For detail, see Table 13.
'' 6. For industrial distribution, see Table 21.

TABLE 3. Relation between Net National Income at Factor Cost, Personal Income, Personal Disposable Income, and Personal Net Saving, 1926-1956

940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
							(mill:	ions of do	llars)	1		1	L				
5,063	6, 305	8, 098	8, 802	9, 583	9, 665	9, 551	10, 361	12,003	12, 905	14, 161	16, 588	18, 654	19, 294	19, 032	20, 683	23, 054	1
207	194	222	210	259	546	1,106	839	862	948	1,030	1.032	1,359	1,461	1,634	1,731	1,765	2
273	291	310	371	423	512	554	559	558	572	545	553	580	610	669	670	718	3
629	- 939	-1,237	- 1, 341	-1,400	- 1, 603	-1,492	-1,384	-1,522	- 1, 787	- 2, 308	- 2, 349	-3,198	-3,029	- 2, 914	- 3, 264	-3.579	4
1,914	5, 851	7, 393	8, 042	8, 865	9, 120	9, 719	10,375	11,901	12, 638	13, 428	15, 824	17, 395	18, 336	18, 421	19, 820	21, 958	5
139	- 296	- 495	- 698	- 838	- 809	- 796	- 791	- 822	- 789	- 740	-1,030	-1,323	-1,432	-1.437	-1,491	-1,720	6
1, 775	5, 555	6, 898	7, 344	8, 027	8, 311	8, 923	9, 584	11,079	11, 849	12, 688	14, 794	16,072	16, 904	16, 984	18, 329	20,238	7
1, 488	- 5, 103	- 5, 500	- 5, 808	- 6, 274	- 6, 969	- 8, 031	-9,090	- 10, 085	- 10,923	- 12,026	13, 460	- 14, 781	- 15, 592	- 16, 175	- 17. 464	- 18, 697	8
287	452	1, 398	1,536	1, 753	1,342	892	494	994	926	662	1, 334	1, 291	1, 312	809	865	1,541	9
78	- 53	327	- 118	- 128	- 239	14	- 54	- 33	107	79	349	331	86	- 75	199	242	10
209	505	1,071	1,654	1,881	1,581	878	548	1,027	1,033	583	985	960	1,226	884	666	1, 299	11

TABLE 4. Relation between Gross National Product at Market Prices and Gross Domestic Product at Factor Cost, 1926-1956

35	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
								(mill	ions of do	llars)								
83	8, 743	8, 328	10, 327	11,088	11, 850	11, 835	11, 850	13, 165	15, 120	16, 343	18,006	21, 170	23, 995	25,020	24, 871	27, 070	30, 098	1
2	- 99	- 75	- 100	- 131	- 150	- 198	- 31	27	89	43	68	90	- 202	- 142	13	14	49	2
2.5	- 831	-1,055	-1,086	-1,118	- 1, 112	-1,004	-1.270	-1,608	-1,765	-1,808	- 2,000	- 2, 469	-2,717	- 2.911	- 2, 947	- 3, 238	- 3, 601	3
:	- 52	- 60	- 67	- 59	- 71	- 80	- 70	- 64	- 70	- 83	- 91	- 115	- 145	- 165	- 147	- 160	- 140	4
3	313	286	270	261	264	251	312	337	325	390	475	450	413	404	423	483	530	5
,11	8, 074	7, 424	9, 344	10,041	10, 781	10, 804	10, 791	11, 857	13, 699	14, 585	16, 458	19, 126	21, 344	22, 206	22, 213	24, 169	26, 936	6

Cross references:
e 1. For detail, see Table 1; for sector accounts consolidation, see Table 19.
2. For detail, see Table 44; for geographical distribution, see Table 35.
4. For detail, see Tables 1, 7 and 16.
5. For detail, see Table 7; for geographical distribution, see Table 28; for geographical distribution of per person income, see Table 29.
6. For detail, see Tables 8 and 38.
7. For geographical distribution, see Table 30.
8. For detail, see Tables 47 and 49.
9. See also Tables 8 and 17.

TABLE 5. Gross National Expenditure in Constant (1949) Dollars, 1926-19561

	TABLE 5: G														
		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
No.							(m	illions o	of dollars	5)					
				,		1	1				1	1		1	
1	Personal Expenditure on Consumer Goods and Services 2	5,010	5,577	6, 128	6, 490	6, 203	5,877	5, 414	5,272	5,534	5,775	6,036	6,420	6,337	6,510
2	Government Expenditure on Goods and Services	792	868	908	1,027	1, 178	1, 160	1,041	842	916	971	961	1,056	1, 127	1, 156
3	Current Expenditure														
4	Gross Fixed Capital Formation														
5	Business Gross Fixed Capital Formation	1, 208	1,449	1,736	1,948	1,608	1,143	609	462	580	708	866	1, 112		1,053
6	New Residential Construction	399	405	426	426	363	322	200	168	207	242	288	336	310	361
7	New Non-Residential Construction	402	502	677	779	635	473	226	150	173	216	269	317	293	286
8	New Machinery and Equipment	426	553	636	734	608	358	194	154	213	266	323	470	456	427
9	Adjusting Entry	- 19	- 11	- 3	9	2	- 10	- 11	- 10	- 13	- 16	- 14	- 11	- 9	- 21
	, , , ,	253	448	332	109	255	- 309	- 171	- 242	45	107	- 235	66	274	699
10	Change in Inventories	260	281	195	256	54			- 134	34	75	134	210	- 36	191
11	Non-Farm Business Inventories	200	201	175	200	37	207	201							
12	Farm Inventories and Grain in Commer- cial Channels	- 33	176	147	- 201	238	- 231	137	- 119	10	32			377	595
13	Adjusting Entry	26	- 9	- 10	54	- 37	31	- 44	11	1		87	50	- 67	- 87
14	Exports of Goods and Services	2,437	2,444	2,766	2,603	2, 264	2,036	1,883	1,903	2, 152	2,366	2,845	2, 903	2,623	2, 885
15	Deduct: Imports of Goods and Services	- 2, 296	- 2,530	- 2,838	- 3, 092	- 2, 811	- 2, 248	-1,925	-1,824	-1,943	- 2,076	- 2, 352	- 2, 600	- 2, 436	- 2, 599
16	Residual Error of Estimate	231	79	61	- 40	- 36	- 186	- 129	- 140	- 181	- 175	- 123	- 117	- 55	- 47
17	Adjusting Entry	- 59	- 65	- 56	16	18	94	76	86	24	2	24	- 20	- 49	- 121
18	Gross National Expenditure in Constant (1949) Dollars	7,576	8, 270	9, 037	9, 061	8, 679	7,567	6, 798	6,359	7, 127	7,678	8, 022	8, 820	8, 871	9, 536
19	Index, Line 18, 1949 = 100	46. 4	50.6	55.3	55.4	53. 1	46.3	41.6	38.9	43.6	47.0	49. 1	54.0	54.3	58.3

<sup>1.</sup> Price indexes based on 1935-1939 were used to deflate the period 1926-1947, while indexes based on 1949 were used to deflate the subsequent period from 1947 to 1956. The two series then were linked at the major group and at the total G.N.E. levels. The year 1947, above on a 1949 base, was used as the year of overlap. The linking process produced residual differences which are the adjusting entries above. For additional information please refer to Sources and Methods, paragraphs 598-606.

TABLE 6. Implicit Price Indexes - Gross National Expenditure, 1926-19561

		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
No.		1920	1921	1920	1929	1930	1931	1932	1933	1934	1933	1930	1931	1930	1939
1	Personal Expenditure on Consumer Goods and Services	70.7	69.8	70.4	71.2	70.4	64.2	59.0	56.6	57.5	57.8	58.8	60.5	61.5	61. 2
2	Government Expenditure on Goods and Services	61.6	61.2	61.7	62. 3	61. 2	59.3	56. 1	54. 9	54.9	55.8	56.6	58. 6	59. 1	59. 1
3	Current Expenditure														
4	Gross Fixed Capital Formation														
5	Business Gross Fixed Capital Formation	58.1	57.3	58. 0	59.6	57.6	54. 4	52. 4	50.7	51.4	52. 1	52. 9	56. 9	56. 4	56. 2
6	New Residential Construction	50.4	50. 4	51.7	54.0	52.6	49.0	44. 9	42. 9	44.4	44.3	45.5	48.8	47.8	48. 2
7	New Non-Residential Construction	59.7	59.6	61.0	62. 9	60. 5	56.0	53. 5	52.1	52.7	53.8	55. 1	59.3	58. 0	57.4
8	New Machinery and Equipment	61.2	59. 1	58. 8	60. 1	57.7	55.6	55. 8	54.6	54.1	54.9	55. 4	59.8	60.1	59. 5
9	Exports of Goods and Services	67.7	66. 2	64. 1	62.7	56.8	47.5	42.7	43.4	47.3	48.3	50. 2	54.8	51.7	50. 3
10	Imports of Goods and Services	66.3	64. 4	63.7	62.9	57.8	50.8	46.8	45.4	48.8	49.0	50.3	54. 2	51.6	51.1
11	Residual Error of Estimate	68. 1	67.2	67.3	67.8	66.8	61.4	56.7	55.0	55. 8	56. 5	57.6	60.0	60. 4	59.8
12	Gross National Expenditure at Market Prices	68. 0	67.1	66.9	67.7	66. 0	62.1	56.3	55.2	55.9	56.2	58.0	59.6	59.5	59.1

<sup>1.</sup> These implicit indexes are currently weighted price indexes. They reflect not only pure price changes, but also changing expenditure patterns within and between major groups. See also Sources and Methods, paragraphs 592-597. The implicit price index for Gross National Expenditure is derived by dividing the total of current dollars by the total of constant dollars.

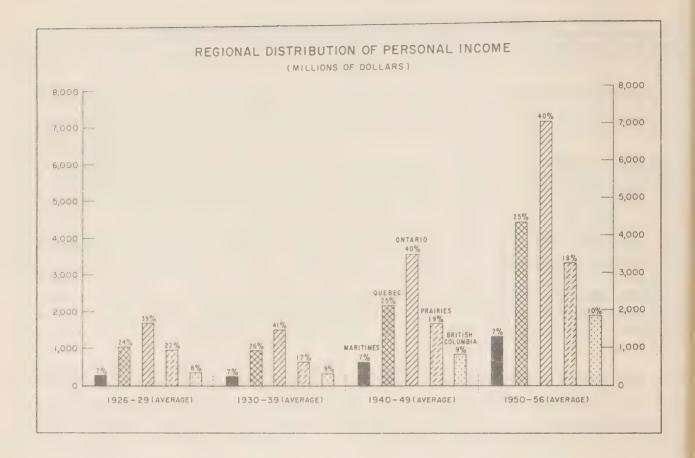
TABLE 5. Gross National Expenditure in Constant (1949) Dollars, 1926-19561

							-											
I.	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
								(mill	ions of d	ollars)								
		1		]		1			1		1		I	1	1		1	
1	7,034	7, 471	7,692	7,902	8, 444	9,267	10,323	10,657	10, 451	10,923	11,642	11,817	12,633	13,338	13, 650	14,738	15, 516	1
ì							1											
1	1,794	2,531	5, 189	5,714	6,499	4,542	2, 294	1,850	1,902	2, 127	2,242	2,806	3, 516	3,517	3, 415	3,550	3,704	2
										1,620	1,680	2, 140	2,670	2,748	2, 676	1		
										507	562	666	846	769	739	796	925	4
	1, 343	1,682	1, 567	1, 234	1, 235	1, 420	1,846	2, 496	2.758	3,032	3, 167	3, 301	3, 588	3, 926	3,723	3, 973	4,787	5
	363	427	356	343	401	472	512	610	638	794	833	727	737	905	946	1,040	1	6
	349	456	524	513	355	352	569	700	850	920	988	1, 074	1, 235	1, 306	1, 272	1, 367	1, 783	7
	638	802	682	389	496	618	777	1, 186	1, 270	1.318		1,500	1,616	1, 715	1,505	1, 566	1, 893	8
١.	. 7	- 3	5	- 11	- 17	- 22	- 12								.,	.,	1,000	9
2	658	68	336	- 309	- 204	- 462	536	446	87	49	561	849	489	590	- 216	401	751	
8	159	216		52	5	211	562	520	70	150	398	493	81	320		116	453	10
	109	210	302	02	3	211	302	320	70	130	370	473	01	320	- 39	110	403	11
	588	- 199	796	- 439	- 252	- 831	- 82	- 74	17	- 101	163	356	408	270	- 177	285	298	12
ŀ	89	51	- 158	78	43	158	56											13
	3, 281	4. 298	3,852	5,340	5, 168	5,059	4, 115	4, 141	4, 193	4,021	3, 999	4, 380	4,850	4.809	4,616	4, 960	5, 313	14
	2, 888	- 3,310	- 3, 549	- 4, 246	- 5,020	- 3,986	- 3,717	- 4, 176			- 4, 206	- 4,685						
ľ	2, 888	- 3,310												- 5, 269	- 5,013	- 5,672	- 6,567	15
ľ	157	- 111	- 142	- 181	- 199	- 258	- 40	32	93	44	66	79	- 167	- 117	11	11	38	16
1.	154	- 143	- 129	- 97	4	- 30	- 106											17
	10, 911	12,486	14, 816	15,357	15, 927	15, 552	15, 251	15.446	15, 735	16, 343	17,471	18, 547	20,027	20, 794	20, 186	21. 961	23, 542	18
	20, 311	20, 400	21,010	20,001	20,001	20,000	201201	20, 120	20, 100	20,0 %0	A 1) I 12	20,01	30,001	20,101	20, 100	21,001	NO, U22	10
	66.8	76.4	90.7	94.0	97.5	95. 2	93.3	94.5	96.3	100.0	106.9	113.5	122.5	127.2	123.5	134.4	144.0	19

<sup>2.</sup> For detail, see Table 48.

TABLE 6. Implicit Price Indexes - Gross National Expenditure, 1926-19561

											1						
1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
63.8	68.3	71.5	73.5	74.3	75. 2	77.8	85.3	96.5	100.0	103.3	113.9	117.0	116.9	118.5	118.5	120.5	1
62. 2	64.6	70.8	73. 1	76.6	80.5	78.3	83.3	94.5	100.0	104. 5	116.6	121.7	126.0	130.6	134.6	142.2	2
									100.0	104.5	116.4	121.3	125.7	131.5	136.0	144.1	3
									100.0	104.6	117.1	122.9	127.2	127.5	129.9	136. 4	4
59. 8	64.5	67. 9	71.9	72. 9	72.6	75. 2	83.5	95.0	100.0	105.7	119.9	124. 1	127.3	128. 4	131. 1	138.5	5
51.3	56. 2	60. 1	64.1	66.6	67.4	71.9	81.0	95. 5	100.0	106.0	123.1	126.6	128.8	129.7	132.5	137.4	6
59.6	62.9	67.6	71.0	72. 1	71.9	76.5	85.3	96.0	100.0	105. 5	118. 2	126.8	131.6	131.4	135. 2	143.0	7
64. 1	69.6	72.7	77.8	76.0	74.4	75.3	83.8	94.0	100.0	105.7	119.6	120.8	123.2	125.0	126.7	134.9	8
55. 1	57.4	61.3	64.5	68.9	71.1	78.0	87.9	96.6	100.0	104.6	116. 2	114.9	112.3	111.5	116. 2	119.3	9
56. 4	59.7	65.0	68.7	71.1	73.0	77.4	86.7	96. 9	100.0	107.3	119.8	110.6	110. 9	111.2	113.6	117. 2	10
62.6	66. 4	70.2	72. 3	74.7	76.4	77.9	85. 1	95. 9	100.0	103. 2	114.5	120. 2	121.0	122.5	124. 3	128.5	11
61.8	66.7	69. 7	72.2	74.4	76.1	77.7	85.2	96. 1	100.0	103.1	114.1	119.8	120.3	123.2	123.3	127. 9	12



2. Analysis of Income and Expenditure Accounts by Sectors of the Canadian Economy

TABLE 7. Personal Income and Expenditure Account, 1926-1956
Income

No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
							(11)	nillions o	of dollar	s)					
1	Wages, salaries, and supplementary labour income:														
	(a) From business (28 a)	1,989	2, 109	2, 292	2,484	2,307	1, 948	1,565	1,420	1,547	1,680	1,833	2,102	2,051	2, 135
	(b) From governments (19 bi)	238	254	269	287	309	309	286	256	274	278	285	303	327	329
	(c) From persons (9 b)	139	143	154	169	170	151	1 24	112	118	121	123	133	137	137
	(d) Deduct employer and employee contributions to social insurance and government pension funds (17)	- 17	- 20	- 22	- 27	- 29	- 26	- 23	- 21	- 23	- 26	- 28	- 34	- 33	- 35
2	Military pay and allowances (19 bii)	7	7	7	8	8	8	8	8	8	9	9	9	9	32
3	Net income received by farm operators from farm production (28 c)	597	607	620	391	339	117	115	95	188	222	226	287	348	412
4	Net income of non-farm unincorporated bus- iness (28 e)	489	532	585	618	540	418	320	282	315	357	398	445	461	475
5	Interest, dividends and net rental income of persons 2 (44a)	494	521	557	580	579	547	458	455	485	483	473	520	538	570
6	Transfer payments (excluding interest):														
	(a) From governments (20 b)	74	77	87	93	112	141	160	181	220	221	224	237	200	0.00
	(b) Charitable contributions from corporations (44b)	4	4	5	5	3	2	2	2	2	3	4	5	226	229
7	Total	4,014	4,234	4, 554	4,608	4,338	3, 615	3,015	2, 790	3,134	3,348	3, 547	4, 007	4, 068	4, 290

<sup>1.</sup> This item differs from line 5 of Table 1 in that it excludes the adjustment which has been made to take account of the accrued net earnings arising out of the operations of the Canadian Wheat Board and the Canadian Co-operative Wheat Producers.

TABLE 8. Personal Income and Expenditure Account, 1926-1956
Expenditure

			_	,											
No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
8	Personal direct taxes:		1	1	1	1	(m	illions	of dollar	S)	1	I	L		
	(a) Income taxes (12a)	22	28	30	34	33	33	35	38	34	42	47	56	63	62
	(b) Succession duties (12b)	16	16	12	16	21	15	11	13	12	20	27	37	31	28
	(c) Miscellaneous (12 c)	15	15	17	18	17	15	18	18	18	18	21	19	21	22
9	Purchases of goods and services:														
	(a) From business (24a)	3, 268	3, 613	4.022	4,306	4,071	3, 533	3,006	2,813	2,998	3, 138	3, 334	3, 643	3,650	3, 742
	(b) Direct services (1 c)	139	143	154	169	170	151	124	112	118	121	123	133	137	137
	(c) Travel expenditure (34a)	89	90	88	97	83	64	44	40	45	58	67	78	77	73
	(d) Other expenditures abroad (34b)	46	47	50	49	43	25	20	19	21	21	25	30	33	32
10	Personal net saving 1 (48)	419	282	181	- 81	- 100	- 221	- 243	- 263	- 112	- 70	- 97	11	56	194
11	Total	4,014	4, 234	4,554	4, 608	4, 338	3, 615	3,015	2, 790	3,134	3,348	3,547	4,007	4.068	4,290

<sup>1.</sup> This series includes changes in farm inventories, See Table 3.

TABLE 7. Personal Income and Expenditure Account, 1926-1956

Income

				,	,			Incom	ie								
1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
							(mill	ions of de	ollars)					1			-
								1		-					1		1
2,471	3, 103	3,724	4, 209	4,363	4, 355	4,706	5, 545	6, 415	6, 866	7, 423	8,696	9, 582	10,323	10, 454	11,089	12,391	(a)
349	361	422	473	500	535	613	663	769	872	930	1,089	1,270	1,391	1,545	1,679	1,854	
139	144	136	130	135	147	168	191	230	262	276	318	356	396	433	447	474	
														100	111		(0)
- 39	- 69	- 114	- 128	- 133	- 136	- 149	- 181	- 224	- 239	- 256	- 336	- 375	- 410	- 422	- 449	- 490	(d)
193	386	641	910	1.068	1, 117	340	83	82	115	137	201	270	309	367	394	424	2
450	463	976	770	1,110	836	1,034	1,086	1,478	1,359	1,156	1, 945	1,916	1,599	1,009	1, 197	1, 448	3
531	637	701	747	811	918	1,072	1, 173	1, 269	1, 389	1,439	1,519	1,572	1,688	1,656	1,793	1,937	4
						-, -, -	1,110	1,200	1,000	1, 100	2,015	1,0.2	1,000	1,000	1, 130	1, 331	7
	000		700														
606	622	673	709	741	790	817	959	998	1, 043	1, 268	1,333	1,418	1,551	1,719	1,911	2, 1 25	5
-																	6
207	194	222	210	259	546	1, 106	839	862	948	1,030	1,032	1,359	1,461	1,634	1,731	1,765	
				200	010	2,200	003	002	940	1,000	1,002	1,000	1, 101	1,004	1, 101	1, 103	(4)
7	10	12	12	11	12	12	17	22	23	25	27	27	28	26	28	30	(b)
4,914	5, 851	7, 393	8, 042	8, 865	9, 120	9, 719	10, 375	11, 901	12, 638	13,428	15, 824	17,395	18,336	18, 421	19, 820	21, 958	7

<sup>2.</sup> Includes all government debt interest paid to persons.

TABLE 8. Personal Income and Expenditure Account, 1926-1956
Expenditure

1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
							(mill:	ions of do	llars)					-			_
1						)			1	1		ı.		1		1	8
																	0
91	239	433	631	772	733	711	695	717	677	612	890	1, 177	1,287	1,296	1,297	1,495	(a)
23	29	37	38	39	47	54	61	58	55	66	69	73	73	78	127	146	(b)
25	28	25	29	27	29	31	35	47	57	62	71	73	72	63	67	79	(c)
																	9
4,262	4,868	5, 237	5, 496	5, 905	6, 534	7,629	8,675	9,677	10,428	11,481	12,802	14.014	14, 753	15, 266	16, 465	17,609	(a)
139	144	136	130	135	147	168	191	230	262	276	318	356	396	433	447	474	(b)
39	19	23	32	52	75	135	167	134	193	226	280	341	365	389	449	498	(c)
48	72	104	150	182	213	99	57	44	40	43	60	70	78	87	103	116	(d)
287	452	1,398	1, 536	1, 753	1, 342	892	494	994	926	662	1, 334	1, 291	1,312	809	865	1,541	10
201	402	1,330	1,000	2, 700	1,012	002											
4 014			0.040	0.00#	0 100	0.710	10, 375	11, 901	12,638	13,428	15, 824	17,395	18, 336	18, 421	19,820	21,958	11
4, 914	5, 851	7, 393	8, 042	8, 865	9, 120	9, 719	10, 375	11, 901	14,036	13,460	10,001	11,330	10,000	10, 401	10,000	21,336	

TABLE 9. Government Revenue and Expenditure Account, 1926-19561

					MARK SIE WAS A TOTAL	page to an experience of the first	HEATON MINNY PROPERTY.	A CALLES TO SERVICE AND ADDRESS OF THE PARTY							
	and the second s	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
No				1			(m	illions o	of dollar	5)					
12	Direct taxes - persons:					33	33	35	38	34	42	47	56	63	62
	(a) Income taxes (8a)	22	28	30	34			11	13	12	20	27	37	31	28
	(b) Succession duties (8b)	16	16	12	16	21	15		18	18	18	21	19	21	22
,	(c) Miscellaneous (8c)	15	15	17	18	17	15	18	18	10	10	21			
					!										
13	Direct taxes - corporations:		1					41	32	42	53	70	84	103	93
	(a) Income tax collections (44c)	32	37	38	46	48	39	41	34	20	00	,,,			
	(b) Excess of income tax liabilities over income tax collections (44d)	2	1	7	2	- 8	- 6	- 9	5	10	12	13	17	- 9	22
14	Withholding taxes (44e)	-000	-	-	-	_	-	_	5	6	7	9	10	10	10
15	Indirect taxes (29a)	614	637	684	686	600	575	546	545	586	608	674	715	701	717
16	Investment income:		67	69	74	75	70	71	75	72	76	75	75	73	71
	(a) Interest (44g)	63	01	03	17	10		1							
	(b) Profits of government business enter- prises (44f)	54	55	71	62	28	2	- 5	- 10	8	17	44	41	28	50
17	Employer and employee contributions to social insurance and government pension funds (1d)	17	20	22	27	29	26	23	21	23	26	28	34	33	35
18	Total?	835	876	950	965	843	769	731	742	811	879	1,008	1,088	1, 054	1, 110

<sup>1.</sup> See also Table 36.
2. Inter-governmental transfers are not included in this total, since in the consolidation of the government sector such transactions cancel out. For details of inter-governmental transfers, see Table 46.

TABLE 10. Government Revenue and Expenditure Account, 1926-19561 Expenditure

No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
-	TO STATE OF THE PROPERTY AND ASSESSED AS A STATE OF THE PROPERTY OF THE PROPER	TWO SECTION AS				monormum d	(m	illions	of dollar	s)					
19	Purchase of goods and services:2			1						1				ı	
	(a) From business (24b)	243	270	284	345	404	371	290	198	221	255	250	307	330	322
	(b) Direct services:														
	(i) Wages and salaries (1b)	238	254	269	287	309	309	286	256	274	278	285	303	327	329
	(ii) Military pay and allowances (2)	7	7	7	8	8	8	8	8	8	9	9	9	9	32
	(c) Wartime military expenditure abroad (excluding military pay) (35a)		-	-	-	-	-	mprodu.	_	-	-	_	-	-	-
20	Transfer payments:														
	(a) Interest (45)	231	234	231	235	244	253	275	283	284	280	277	273	266	275
	(b) Other (6a)	74	77	87	93	112	141	160	181	220	221	224	237	226	229
21	Subsidies (29b)	2	3	5	5	7	18	9	8	8	23	14	10	62	- 17
22	Surplus (+) or deficit (-) (on transactions relating to the National Accounts) <sup>3</sup> (51)	40	31	67	- 8	- 241	- 331	- 297	- 192	- 204	- 187	- 51	- 51	- 166	- 60
23	Total <sup>4</sup>	835	876	950	965	843	769	731	742	811	879	1,008	1,088	1,054	1, 110

See also Table 37.
 See line 2, Table 2.
 For a reconciliation of the federal content of this consolidated surplus (or deficit) with the conventional federal budgetary surplus (or deficit) see Table 53.

TABLE 9. Government Revenue and Expenditure Account, 1926-19561
Revenue

																-
1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
						(milli	ons of do	llars)				<del>i</del>				
1														1		12
239	433	631	772	733	711	695	717	677	612	890	1,177	1, 287	1,296	1,297	1,495	(a)
29	37	38	39	47	54	61	58	55	66	69	73	73	78	127	146	(b)
28	25	29	27	29	31	35	47	57	62	71	73	72	63	67	79	(c)
								The state of the s								13
327	681	735	705	580	604	668	651	698	841	1,268	1, 372	1,369	1, 176	1,110	1,372	(a)
183	- 52	- 95	- 107	19	50	34	36	20	142	148	12	- 149	- 94	170	58	(b)
						,										
24	29	27	27	29	29	35	41	47	54	56	55	54	58	67	68	14
1 100	1 170	1 200	1 070	1 000	1 500	1 705	1 040	1 005	0.000	0 505	0 017	2 001	9 099	0 017	2 772	15
1,129	1,179	1,329	1,319	1,200	1,506	1, 785	1,840	1,885	4,063	2, 59 (	2,811	3,021	3,033	3,317	3, 122	13
																16
77	88	99	105	119	120	113	127	165	155	181	215	206	237	234	256	(a)
															540	
134	181	249	262	311	284	262	259	254	316	353	402	445	450	508	563	(D)
69	114	128	133	136	149	181	224	239	256	336	375	410	422	449	490	17
																-
2, 239	2, 715	3, 170	3, 342	3, 269	3, 538	3, 869	4,000	4,097	4, 567	5, 969	6, 571	6, 788	6, 719	7, 346	8, 249	18
	239 29 28 327 183 24 1,129 77 134	239 433 29 37 28 25 327 681 183 -52 24 29 1,129 1,179 77 88 134 181	239	239	239     433     631     772     733       29     37     38     39     47       28     25     29     27     29       327     681     735     705     580       183     -52     -95     -107     19       24     29     27     27     29       1,129     1,179     1,329     1,379     1,266       77     88     99     105     119       134     181     249     262     311       69     114     128     133     136	239	(milli 239	(millions of do 239	(millions of dollars)  239	239	(millions of dollars)  239	239   433   631   772   733   711   695   717   677   612   890   1,177	(millions of dollars)    239	(millions of dollars)  (page 4.29 27 27 29 31 35 47 57 62 71 73 73 78 72 63  (millions of dollars)  (millions of dollars)  (millions of dollars)  (page 4.29 25 29 27 27 29 31 35 47 57 612 890 1,177 1,287 1,296 1,29	(millions of dollars)  239	(millions of dollars)  239

TABLE 10. Government Revenue and Expenditure. Account, 1926-1956<sup>1</sup>
Expenditure

1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
							/milli	ons of do	llars)								
							(********		,								19
561	830	2, 466	2, 191	2, 149	1,374	769	795	946	1, 140	1, 277	1,981	2, 739	2,732	2, 549	2,707	2, 988	1
201	830	2, 400	2, 191	2, 149	1,512	103	130	240	2, 230	2,2	2,002	2, 100	-,				(b)
349	361	422	473	500	535	613	663	769	872	930	1.089	1,270	1, 391	1,545	1,679	1,854	(i)
						340	83	82	115	137	201	270	309	367	394	424	(ii)
193	386	641	910	1,068	1,117	340	0.0	0.6	110	101	202	2,0	000				
13	58	145	603	1,261	630	74	_	100	_	_	_	_	_	_	-	6700	(c)
13	30	140	000	1,201	000												
																	20
273	291	310	371	423	512	554	559	558	572	545	553	580	610	669	670	718	(a)
207	194	222	210	259	546	1, 106	839	862	948	1,030	1,032	1,359	1,461	1,634	1,731	1,765	(b)
201	194	444	210	233	510	1,100	000										
		-	011	0.00	262	236	177	75	77	63	128	100	110	86	79	121	21
53	74	93	211	267	262	230	111	10	"	00	2.00	200					
		4	4 =00	0 505	- 1, 707	- 154	753	708	373	585	985	253	175	- 131	86	379	22
- 82	45	-1.584	-1,799	- 2, 585	- 1, 101	-134	100	100	010	000							
						0.000	0.000	4 000	4 007	4, 567	5, 969	6, 571	6, 788	6, 719	7, 346	8, 249	23
1,567	2, 239	2, 715	3, 170	3, 342	3, 269	3, 538	3, 869	4, 000	4, 097	4, 301	3, 909	0, 311	U <sub>1</sub> 100	0, 113	1, 340	0, 810	

<sup>4.</sup> In addition to total expenditure, this item includes the government surplus or deficit. Inter-governmental transfers are not included in this total, since 1 the consolidation of the government sector such transactions cancel out. For details of inter-governmental transfers, see Table 46.

TABLE 11. Business Operating Account, 1926-1956
Revenue

No. (millions of dollars) 24 | Sales to residents: 2,998 3,138 3.334 3.643 3,650 3,742 2,813 3,533 3,006 4,022 4,306 4,071 3,268 3,613 (a) Persons (9 a) ..... (b) Governments 1 (19 a) ..... (c) Business gross fixed capital forma-(1) New residential construction (54 a) ..... (ii) New non-residential construc-tion (54 b) ..... (iii) New machinery and equipment (54 c)..... (d) Value of physical change in inventories (55) ..... - 100 25 | Sales to non-residents: (a) Travel expenditures (38 b) ..... 1,245 1,349 1,141 1,211 1,373 1,047 (b) Other (38 c) ...... 1,466 1,414 1,550 - 114 - 71 26 Residual error of estimate ....... 6,304 6,037 5,886 4,209 3,865 4,409 4,781 5,252 7,408 6.681 5.236 7,240 6,123 6,596

TABLE 12. Business Operating Account, 1926-1956
Expenditure

No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1 936	1937	1938	1939
							(m	illions o	f dollars	:)					
28	Factor costs:						İ								
	(a) Wages, salaries, and supplementary labour income (1 a)	1,989	2,109	2,292	2,484	2,307	1,948	1,565	1,420	1,547	1,680	1,833	2,102	2,051	2,135
	(b) Investment income (excluding in- terest and dividends received from non-residents and including in- terest and dividends paid to non- residents) (41)	820	898	1,022	1.026	772	564	390	472	604	662	792	928	837	1,071
	(c) Net income received by farm operators from farm production (3)	597	607	620	391	339	117	115	95	188	222	226	287	348	412
!	(d) Adjustment on grain transactions <sup>2</sup> (49 c)	12	- 7	16	1	4	- 23	- 11	- 29	- 21	- 4	- 27	- 7	5	- 50
:	(e) Net income of non-farm unincorporated business (4)	489	532	585	618	540	418	320	282	315	357	398	445	461	475
	(f) Inventory valuation adjustment (50)	46	29	1	- 15	239	172	109	- 22	- 39	- 20	- 36	- 87	67	- 56
29	Other costs:														
	(a) Indirect taxes (15)	614	637	684	686	600	575	546	545	586	608	674	715	701	717
	(b) Less subsidies (21)	- 2	- 3	- 5	- 5	- 7	- 18	- 9	- 8	- 8	- 23	- 14	- 10	- 62	17
1	(c) Capital consumption allowances and miscellaneous valuation adjust-														
	ments (49b)	567	611	671	717	711	646	576	528	522	531	555	594	604	637
30	Purchases from non-residents (33 b)	1,147	1,235	1,395	1,477	1.151	723	535	505	614	668	780	999	840	917
31	Residual error of estimate	- 156	- 52	- 41	28	25	114	73	77	1 01	100	71	71	34	29
32	Total	6,123	6, 596	7,240	7,408	6, 681	5,236	4,209	3,865	4,409	4,781	5,252	6,037	5,886	6, 304

<sup>1.</sup> See footnote 1, Table 7.

<sup>1.</sup> See footnotes 1, 2, 3, Table 2.

TABLE 11. Business Operating Account, 1926-1956

Revenue

-																	
.940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
							(mill	ions of d	ollars)			1		-			
			]	1					1	}	1	1	1	1	1		24
1,262	4,868	5,237	5,496	5,905	6,534	7,629	3,675	9,677	10,428	11,481	12,802	14,014	14,753	15, 266	16,465	17,609	(a)
561	830	2,466	2,191	2,149	1,374	769	795	946	1,140	1,277	1,981	2,739	2,732	2,549	2,707	2,988	(b)
																	(c)
186	240	214	220	267	318	368	494	609	794	883	895	933	1,166	1,227	1,378	1,526	(i)
208	287	354	364	256	253	435	597	916	920	1,042	1,270	1,566	1,719	1,671	1,848	2,550	(ii)
		400															
409	558	496	303	377	460	585	994	1,194	1,318	1,423	1,794	1,952	2,113	1,881	1,984	2,553	(iii)
255	88	135	- 180	- 145	- 311	333	4 03	113	49	550	914	512	583	- 130	281	815	(d)
																	25
104	111	81	88	119	165	221	251	279	285	275	274	275	302	305	328	336	(a)
1,652	2, 296	2,213	3,297	3,371	3,352	2,919	3,325	3,701	3,653	3,817	4,700	5, 153	4.933	4, 695	5,276	5,863	(b)
. 98	- 74	- 100	- 131	- 149	- 197	- 31	27	89	44	68	90	- 201	- 142	13	14	49	26
1,539	9,204	11,096	11,648	12,150	11,948	13,228	15,561	17,424	18,631	20, 816	24,720	26, 943	28,159	27,477	30,281	34, 289	27

<sup>2.</sup> See footnote 4, Table 2.

TABLE 12. Business Operating Account, 1926-1956

Expenditure

								Expend	iture								
.940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
							(mill	ions of do	ollars)								
																	28
2, 471	3,103	3,724	4,209	4,363	4,355	4,706	5,545	6,415	6,866	7,423	8,696	9,582	10, 323	10,454	11,089	12,391	(a)
070	1.593	1,870	1,898	1,863	1,895	2,092	2,430	2,621	2,572	3,392	3,810	3,807	3,862	3,750	4,560	5,156	(b)
1,279	1,593	1,810														1 440	
450	463	976	770	1,110	836	1,034	1,086	1,478	1,359	1,156	1,945	1,916	1,599	1,009	1,197	1,448	(c)
33	-	- 47	- 50	- 22	70	22	34	- 100	- 111	166	- 12	43	- 24	8	64	20	(d)
531	637	701	747	811	918	1,072	1,173	1,269	1,389	1,439	1,519	1,572	1,688	1,656	1,793	1,937	(e)
121	- 156	- 122	- 83	- 52	- 37	- 254	- 571	- 506	- 112	- 374	- 643	106	- 11	86	- 217	- 260	(f)
																	29
884	1,129	1,179	1,329	1,379	1,266	1,508	1,785	1,840	1,885	2,063	2,597	2,817	3,021	3, 033	3,317	3,722	(a)
- 53	- 74	- 93-	- 211	- 267	- 262	- 236	- 177	- 75	- 77	- 53	- 128	- 100	- 110	- 86	- 79	- 121	(p)
							1 000	1,441	1,673	1,913	2, 203	2,422	2,673	2,905	3, 163	3,492	(c)
750	893	1,043	1,037	1,005	968	998	1,223	1,441	1,013	1,913	2,200	2, 144	2,010	2,000	0,200	0,100	
1,216	1,541	1,765	1,871	1,810	1,741	2, 257	3,060	3,130	3,230	3,769	4,823	4, 576	4,996	4,675	5,408	6,553	30
99	75	100	131	150	591	31	- 27	- 89	- 43	- 68	- 90	202	142	- 13	- 14	- 49	31
EPS	19	100	131	130	190									475			
7,539	9,204	11,096	11,648	12,150	11,948	13,228	15, 561	17,424	18,631	20,816	24, 720	26, 943	28, 159	27,477	30, 281	34,289	32

<sup>2.</sup> This item is the adjustment to take account of the accrued earnings of farm operators arising out of the operations of the Canadian Wheat Board and the radian Co-operative Wheat Producers, See footnote 5, Table 52.

TABLE 13. Non-Residents' Revenue and Expenditure Account, 1926 -1956 1

Receipts from Canada

(Canadian Imports)

			,											
No.	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
						(II	illions	of dollar	s)					
33 Receipts from business: (a) Interest and dividends (146a)	173	190	207	252	278	253	228	187	192	196	238	230	237	236
(b) Other than interest and dividends	1, 147	1, 235	1,395	1, 477	1, 151	723	535	505	614	668	780	999	840	917
34 Receipts from persons: (a) Travel expenditures (9c) (b) All other receipts (9d)	89 46	90 47	88 50	97 49	83 43	64 25	44 20	40 19	45 21	58 21	67 25	78 30	77 33	73 32
35 Receipts from Government:  (a) War time military expenditure abroad (excluding military pay) (19c)  (b) Interest (46b)	- 67	- 67	- 68	- 70	- 70	77	- 74	77	- 76	- 74	73	- 72	70	- 70
36 Surplus (+) or deficit (-) on current account (on transactions relating to the National Accounts) (56)	128	- 11	- 35	- 313	- 339	- 175	- 97	- 2	70	126	245	182	99	123
37 Total	1, 650	1,618	1,773	1, 632	1, 286	967	804	826	1, 018	1, 143	1, 428	1, 591	1, 356	1, 451

<sup>1.</sup> These figures differ from those shown in reports on The Canadian Balance of International Payments, Dominion Bureau of Statistics, because adjustments have been make to the figures of receipts and payments to achieve consistency with other component series. See Table 55.

TABLE 14. Non-Residents' Revenue and Expenditure Account, 1926 - 1956 1

Payments to Canada

(Canadian Exports)

No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
							(m	illions	of dollar	s)					
38	Payments to business:														
	(a) Interest and dividends (42a)	10	10	10	14	15	15	14	16	29	31	34	35	37	31
	(b) Travel expenditures (25a)	152	163	1 77	198	180	153	114	89	106	117	142	166	149	149
	(c) Other payments (25b)	1, 466	1, 414	1,550	1, 373	1,047	766	653	699	855	962	1, 211	1, 349	1, 141	1, 245
39	Payments to other sectors:														
	Interest and dividends (42b)	22	31	36	47	44	33	23	22	28	33	41	41	29	26
40	Total	1, 650	1, 618	1, 773	1, 632	1, 286	967	804	826	1, 018	1, 143	1, 428	1,591	1, 356	1, 451

<sup>1.</sup> See footnote 1, Table 13.

TABLE 15. Investment Income Appropriation Account, 1926-1956
Source

Property and the second second	The second secon	ASS-PS-SEZE Y20000000000000	-	promise delegation description	mercuo conscionos,	POSA, 6. estimanegaging								
No.	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
						( n	illions	of dollar	S)					
41 Investment income (excludividends received fro and including interest paid to non-residents)  42 Interest and dividends froceived by:	om non-residents t and dividends (28b)820	898	1, 022	1, 026	772	564	390	472	604	662	792	928	837	1, 071
(a) Corporations (38a)		10	10	14	15	15	14	16	29	31	34	35	37	31
(b) Other sectors (39)	22	31	36	47	44	33	23	22	28	33	41	41	29	26
43 Total	852	939	1,068	1, 087	831	612	427	510	661	726	867	1, 004	903	1, 128

## TABLE 13. Non-Residents' Revenue and Expenditure Account, 1926-1956 1 Receipts from Canada

(Canadian Imports)

		,	,															
:	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
								( m	illions of	dollars)								-
											1			1				33
	242	220	210	196	196	180	243	278	270	332	411	382	344	335	354	416	462	(a)
1	, 216	1, 541	1, 765	1, 871	1, 810	1,741	2, 257	3,060	3, 130	3, 230	3, 769	4, 823	4, 576	4, 996	4, 675	5, 408	6, 553	(b)
																		34
	39	19	23	32	52	75	135	167	134	193	226	280	341	365	389	449	498	(a)
	48	72	104	150	182	213	99	57	44	40	43	60	70	78	87	103	116	(b)
																		35
	13	58	145	603	1, 261	630	74											
								-	-		-	-	-	-	-	-	-	(a)
	71	66	60	65	68	71	69	59	55	58	64	68	69	69	69	67	68	(p)
																		36
	179	491	54	527	- 8	687	333	19	417	168	- 330	- 524	173	- 443	- 427	- 679	- 1,358	36
1	, 808	2,467	2, 361	3, 444	3, 561	3, 597	3, 210	3, 640	4, 050	4, 021	4, 183	5, 089	5, 573	5, 400	5, 147	5, 764	6, 339	37

TABLE 14. Non-Residents' Revenue and Expenditure Account, 1926-1956 1

Payments to Canada

(Canadian Exports)

1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
							( m:	illions of	dollars)								
1																	38
24	27	35	27	39	42	36	30	33	22	30	29	49	71	61	80	71	(a)
104	111	81	88	119	165	221	251	279	285	275	274	275	302	305	328	336	(p)
1, 652	2, 296	2, 213	3, 297	3, 371	3, 352	2, 919	3, 325	3, 701	3, 653	3, 817	4, 700	5, 153	4, 933	4,695	5, 276	5, 863	(c)
																	39
28	33	32	32	32	38	34	34	37	61	61	86	96	94	86	80	69	00
1, 808	2, 467	2, 361	3, 444	3, 561	3, 597	3,210	3, 640	4, 050	4, 021	4, 183	5, 089	5. 573	5, 400	5, 147	5, 764	6, 339	40

TABLE 15. Investment Income Appropriation Account, 1926-1956

Source

19	40	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
								( m:	illions of	dollars								
1.	279	1, 593	1, 870	1, 898	1, 863	1, 895	2, 092	2, 430	2, 621	2, 572	3, 392	3, 810	3, 807	3,862	3, 750	4, 560	5, 156	41
	24	27	35	27	39	42	36	30	33	22	30	29	49	71	61	80	71	(a)
	28	33	32	32	32	38	34	34	37	61	61	86	96	94	86	80	69	(b)
1,	331	1, 653	1, 937	1, 957	1, 934	1, 975	2, 162	2, 494	2, 691	2, 655	3, 483	3, 925	3, 952	4, 027	3, 897	4, 720	5, 296	43

TABLE 16. Investment Income Appropriation Account, 1926-1956
Disposition

		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
No.							( m	illions o	of dollar	s)					
44	To Canadian residents:														
	(a) Interest, dividends, and net rental income of persons (5)	494	521	557	580	579	547	458	455	485	483	473	520	538	570
1	(b) Charitable contributions from corporations (6b)	4	4	5	5	3	2	2	2	2	3	4	5	4	6
*	(c) Corporation income tax collections (13a)	32	37	38	46	48	39	41	32	42	53	70	84	103	93
!	(d) Excess of corporation income tax liabilities over collections (13b)	2	1	7	2	- 8	- 6	- 9	5	10	12	13	17	- 9	22
1	(e) Witholding taxes (14)	-	-	-		-	-	-	5	6	7	9	10	10	10
	(f) Profits of government business enterprises (16b)	54	55	71	62	28	2	- 5	- 10	8	17	44	41	28	50
	(g) Government interest revenue (16a)	63	67	69	74	75	70	71	75	72	76	75	75	73	71
	(h) Undistributed corporation profits (49a)	194	231	277	231	2	- 115	- 158	- 35	52	85	145	223	115	275
45	Less: Interest on the public debt (20a)	- 231	- 234	- 231	- 235	- 244	- 253	- 275	- 283	- 284	- 280	- 277	- 273	- 266	- 275
46	To non-residents, interest and dividends received from:														
	(a) Business (33a)	173	190	207	252	278	253	228	1 87	192	196	238	230	237	236
	(b) Government (35b)	67	67	68	70	70	77	74	77	76	74	73	72	70	70
47	Total	852	939	1, 068	1,087	831	612	427	510	661	726	867	1, 004	903	1, 128

TABLE 17. National Saving Account, 1926-1956 Source

No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
							(m	illions o	of dollar:	5)					
	Personal net saving (10)	419	282	181	- 81	- 100	- 221	- 243	- 263	- 112	- 70	- 97	11	56	194
23	(a) Undistributed corporation profits (44h)	194	231	277	231	2	- 119	- 158	- 35	52	85	145	223	1 15	275
	(b) Capital consumption allowances and miscellaneous valuation adjustments (29c)	567	611	671	717	711	646	576	528	522	531	555	594	604	637
	(c) Adjustment on grain transactions (28d)	12	- 7	16	1	4	- 23	- 11	- 29	- 21	- 4	- 27	- 7	5	- 50
50	Inventory valuation adjustment (28f)	46	29	1	- 15	239	172	109	- 22	- 39	- 20	- 36	- 87	67	- 56
51	Government surplus (+) or deficit (-) (22)	40	31	67	- 8	- 241	- 331	- 297	- 192	- 204	- 187	- 51	- 51	- 166	- 60
52	Residual error of estimate	- 156	- 52	- 41	28	25	114	73	77	101	190	71	71	34	29
53	Total	1, 122	1, 125	1, 172	873	640	238	49	64	299	435	560	754	715	969

TABLE 16. Investment Income Appropriation Account, 1926-1956
Disposition

_									Disposi	£1011								
	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
								(π	illions of	dollars)								
											e proprieta de la constanta de							44
	606	622	673	709	741	790	817	959	998	1, 043	1, 268	1, 333	1, 418	1,551	1, 719	1, 911	2, 125	(a)
	7	10	12	12	11	12	12	17	22	23	25	27	27	28	26	28	30	(b)
	141	327	681	735	705	580	604	668	651	698	841	1, 268	1,372	1,369	1, 176	1, 110	1.372	(c)
	186	183	- 52	- 95	- 107	19	50	34	36	20	142	148	12	- 149	- 94	170	. 58	(d)
	13	24	29	27	27	29	29	35	41	47	54	56	55	54	58	67	68	(e)
	95	134	181	249	262	311	284	262	259	254	316	353	402	445	450	508	563	(f)
	70	77	88	99	105	119	120	113	127	165	155	181	215	206	237	234	256	(g)
	173	281	365	331	349	376	488	628	790	587	752	662	618	729	571	879	1,012	(h)
-	273	- 291	- 310	- 371	- 423	- 512	- 554	- 559	- 558	- 572	- 545	- 553	- 580	- 610	- 669	- 670	- 718	45
																		46
	242	220	210	196	196	180	243	278	270	332	411	382	344	335	354	416	462	(a)
	71	66	60	65	68	71	69	59	55	58	64	68	69	69	69	67	68	(b)
1	, 331	1, 653	1, 937	1, 957	1, 934	1, 975	2, 162	2,494	2, 691	2, 655	3,483	3, 925	3, 952	4, 02 7	3, 897	4, 720	5, 296	47

TABLE 17. National Saving Account, 1926-1956

								Some									
1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
							(n	nillions of	f dollars)								
287	452	1, 398	1, 536	1, 753	1,342	892	494	994	926	662	1, 334	1, 291	1, 312	809	865	1, 541	48
																	49
173	281	365	331	349	376	488	628	790	587	752	662	618	729	571	<b>8</b> 79	1, 012	
750	893	1, 043	1,037	1,005	968	998	1, 223	1, 441	1,673	1,913	2, 203	2, 422	2, 673	2, 905	3, 163	3, 492	(b)
33	-	- 47	- 50	- 22	70	22	34	- 100	- 111	166	- 12	43	- 24	8	64	20	(c)
- 121	- 156	- 122	- 83	- 52	- 37	- 254	- 571	- 506	- 112	- 374	- 643	106	- 11	86	- 217	- 260	50
- 82	45	- 1, 584	- 1, 799	- 2, 585	- 1, 707	- 154	753	708	373	585	985	253	175	- 131	86	379	51
99	75	100	131	150	198	31	- 27	- 89	- 43	- 68	- 90	202	142	- 13	- 14	- 49	52
1, 139	1, 590	1, 153	1, 103	598	1, 210	2, 023	2, 534	3, 238	3, 293	3, 636	4, 439	4, 935	4, 996	4, 235	4, 826	6, 135	53

TABLE 18. National Saving Account, 1926-1956
Disposition

-					-										
No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
							(1	nillions	of dolla	rs)					
54	Business gross fixed capital formation <sup>1</sup> :														1
	(a) New residential construction (24ci)	201	204	220	230	191	158	90	72	92	107	131	164	148	174
	(b) New non-residential construction (24cii)	240	299	413	490	384	265	121	78	91	116	148	188	170	164
	(c) New machinery and equipment (24 ciii)	261	327	374	441	351	199	108	84	115	146	179	281	274	254
55	Value of physical change in inventories (24d)	135	253	159	52	77	- 95	- 100	- 91	32	39	- 72	9	57	282
56	Surplus (+) or deficit (-) on current account with non-residents 2 (36)	128	- 11	- 35	- 313	- 339	- 175	- 97	- 2	70	126	245	182	99	123
57	Residual error of estimate	157	53	41	- 27	- 24	- 114	- 73	- 77	- 101	- 99	- 71	- 70	- 33	- 28
58	Total	1, 122	1, 125	1, 172	873	640	238	49	64	299	435	560	754	715	969

<sup>1.</sup> See footnote 4. Table 2. For reconciliation with "private and public investment" figures published by the Department of Trade and Commerce, See Table 54.

2. See footnote 1, Table 13.

TABLE 19. Sector Accounts Consolidation, 1926-1956
National Uncome and Gross National Product

-			11401011	al Mico	me and	GI USS 1	vationa.	Produc	Ct .						
No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
	Income originating in:						(1	millions	of dolla	rs)	-				
	Personal sector:			İ		Ì			1		1	1	1	1	1
1	Wages, salaries, and supplementary														
	labour income	139	143	154	169	170	151	1 24	112	118	121	123	133	137	137
2	Business sector	3, 953	4, 268	4, 536	4,505	4,201	3, 196	2, 488	2, 218	2,594	2, 897	3, 186	3, 668	3, 769	3,987
3	Wages, salaries, and supplementary labour income	1, 989	2, 109	2 000	2 404								1,000	٥, ١٠٠٠	0,001
4	and dividends paid to non-residents	1, 909	2, 109	2, 292	2, 484	2, 307	1, 948	1,565	1,420	1, 547	1,680	1, 833	2, 102	2, 051	2, 135
5	Net income received by farm operators	820	898	1.022	1,026	772	564	390	472	604	662	792	928	837	1,071
6	from farm production	597	607	620	391	339	117	115	95	188	222	226	287	348	412
7	Net income of non-farm unincorporated		- 7	16	1	4	- 23	- 11	- 29	- 21	- 4	- 27	- 7	5	- 50
8	business	489	532 29	585	618	540 239	418 172	320 109	282	- 315 - 39	357	398	- 445 - 87	461 67	475
9	Government sector	245	261	276	2.95	O s Ri	-								
10	Wages, salaries, and sunnlementary		WO A	210	2 30	317	317	294	264	282	287	294	312	336	361
11	labour income	238	254 7	269 7	287	309 8	309 8	286 8	256 8	27 <u>4</u> 8	278 9	285 9	303 9	327 9	329 32
12	Non-residents' sector	- 208	- 216	- 229	- 261	- 289	- 282	907	000						
13	Interest and dividends paid by non- residents:					203	202	- 265	- 226	- 211	- 206	- 236	- 226	- 241	- 249
14	(a) To Canadian corporations (b) To other Canadian sectors Less interest and dividends received	10 22	10 31	10 36	14 47	15 44	15 33	14 23	16 22	29 28	31 33	34 41	35	37	31
15	Dy non-residents:									20	33	41	41	29	26
16	(a) From Canadian business	- 173		- 207 - 68	- 252 - 70		- 253 - 77	- 228 - 74	- 187 - 77	- 192 - 76	- 196 - 74	- 238 - 73	- 230 - 72	- 237 - 70	- 236 - 70
17	Net National Income at factor cost	4, 129	4.356	4 737	4 700	4 200									
18			-,000	2) (01	*, (08	7, 399	3, 382	2, 641	2,368	2, 783	3, 099	3, 367	3, 887	4, 001	4,236
19	cellaneous valuation adjustments Indirect taxes	567	611	671	717	711	646	576	528	522	531	555	E04	004	***
20.	Less subsidies Residual error of estimate		- 3	684	686	600	575	546	545	586	608	674	594 715	604 701	637 717
			- 52	- 41	28	25	114	73	77	101	- 23 100	- 14 71	- 10 71	- 62 34	17 29
22	Pross National Product at Market Prices	5, 152	5,549	6, 046	6. 134	5 720	4 000	0.000							
	1	1		-, 020	0, 104	0, 168	4, 699	3, 827	3,510	3, 984	4, 315	4, 653	5, 257	5, 278	5, 636

TABLE 18. National Saving Account, 1926-1956
Disposition

-																		
194	0	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
								(mi	llions of	dollars)								
		-									1	1						54
1	86	240	214	220	267	318	368	494	609	794	883	895	933	1, 166	1, 227	1,378	1, 526	1
2	08	287	354	364	256	253	435	597	816	920	1, 042	1, 270	1, 566	1, 719	1, 671	1,848	2, 550	(b)
4	09	558	496	303	377	460	585	994	1, 194	1, 318	1, 423	1, 794	1, 952	2, 113	1, 881	1, 984	2, 553	(c)
2	55	88	135	- 180	- 145	- 311	333	403	113	19	550	914	512	583	- 130	281	815	55
1	79	491	54	527	- 8	687	333	19	417	168	- 330	- 524	173	- 443	- 427	- 679	-1,358	56
	98	- 74	- 100	- 131	- 149	- 197	- 31	27	89	44	68	90	- 201	- 142	13	14	49	57
1, 1	39	1, 5 90	1, 153	1, 103	5 98	1, 210	2, 023	2, 534	3, 238	3, 293	3, 636	4, 439	4, 935	4, 996	4, 235	4, 826	6, 135	58

TABLE 19. Sector Accounts Consolidation, 1926-1956 National Income and Gross National Product

_																	
1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
							(m	illions of	dollars)								
139	144	136	130	135	147	168	191	230	262	276	318	356	396	433	447	474	1
4, 643	5, 640	7, 102	7, 491	8, 073	8, 037	8, 672	9, 697	11, 177	11, 963	13, 202	15, 315	17, 026	17, 437	16, 963	18, 486	20, 692	2
2, 471	3, 103	3, 724	4, 209	4, 363	4, 355	4, 706	5, 545	6, 415	6, 866	7, 423	8, 696	9, 582	10, 323	10, 454	11,089	12, 391	3
1, 279	1, 593	1, 870	1, 898	1, 863	1, 895	2, 092	2, 430	2, 621	2, 572	3, 392	3, 810	3, 807	3, 862	3, 750	4, 560	5. 156	4
450 33	463	976	770 - 50	1, 110 - 22	836 70	1, 034 22	1, 086 34	1,478	1, 359 - 111	1, 156 166	1, 945	1, 916	1, 599	1,009	1, 197 64	1. 448 20	5
531	637	701	747	811	918	1, 072	1, 173	1, 269	1,389	1, 439	1, 519	1, 572	1, 688	1,656	1, 793	1, 937	7
121	- 156	- 122	- 83	- 52	- 37	- 254	- 571	- 506	- 112	- 374	- 643	106	- 11	86	- 217	- 260	8
542	747	1, 063	1, 383	1, 568	1, 652	953	746	851	987	1,067	1, 290	1, 540	1, 700	1, 912	2, 073	2, 278	9
349	361	422	473	500	<b>53</b> 5	613	663	769	872	930	1,089	1, 270	1,391	1, 545	1,679	1, 854	10
193	386	641	910	1, 068	1, 117	340	83	82	115	137	201	270	309	367	394	424	11
- 261	- 226	- 203	- 202	- 193	- 171	- 242	- 273	- 255	- 307	- 384	- 335	- 268	- 239	- 276	- 323	- 390	12
24 28	27 33	35 32	27 32	39 32	42 38	36 34	30 34	33 37	22 61	30 61	29 86	49 96	71 94	61 86	80 80	71 69	13 14
- 242 - 71	- 220 - 66	- 210 - 60	- 196 - 65	- 196 - 68	- 180 - 71	- 243 - 69	- 278 - 59	- 270	- 332 - 58	- 411 - 64	- 382 - 68	- 344	- 335	- 354	- 416	- 462 - 68	15 16
				0 1100	0.00%	0.884	10 201	12 802	10 000	14 101	10 500	10 084	19, 294	19,032	20, 683	92 084	17
5, 063	6, 305	8, 098	8, 802	9. 583	9, 665	9, 551	10, 361	12, 003	12, 905	14, 161	16, 588	18, 654				23, 054	
750 884	893 1, 129	1, 043	1,037	1,005	968 1, 266	998 1,506	1, 223 1, 785	1,441	1, 673 1, 885	1, 913 2, 063	2, 203 2, 597	2, 422 2, 817	2, 673 3, 021	2, 905 3, 033	3, 163 3, 317	3, 492 3, 722	18
- 53 99	- 74 75	- 93 100	- 211 131	- 267 150	- 262 198	- 236 31	- 177 - 27	- 75 - 89	- 77	- 63 - 68	- 128 - 90	- 100 202	110	- 86 - 13	- 79 - 14	- 121 - 49	20 21
0.845					44 008	44 050	10 108	18 190	10 242	18, 006	21, 170	23, 995	25, 020	24, 871	27, 970	30,008	22
6, 743	8, 328	10, 327	11,088	11, 850	11, 835	11, 850	13, 165	15, 120	16, 343	10,000	~1, 1 10	A3, 500	20, 000	AE, 011	71, 410	34, 400	100

TABLE 20. Sector Accounts Consolidation, 1926-1956 Gross National Expenditure

				Gross	Nation	al Expe	narture								
No		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
							(17	nillions	of dollar	rs)					
1	and a second sec														
I.	Personal expenditure on consumer goods and services	3,542	3,893	4,314	4,621	4,367	3,773	3,194	2,984	3,182	3,338	3,549	3,884	3,897	3,984
2	Purchases from business	3, 268	3, 613	4, 022	4, 306	4, 071	3, 533	3, 006	2, 813	2, 998	3,138	3, 334	3, 643	3, 650	3,742
3	Purchases of direct services	139	143	154	169	170	151	124	112	118	121	123	133	137	137
4	Purchases from non-residents	135	137	138	146	126	89	64	59	66	79	92	108	110	105
5	Government expenditure on goods and services	488	531	560	640	721	688	584	462	503	542	544	619	666	683
6	Purchases from business	243	270	284	345	404	371	290	198	221	255	250	307	330	322
7	Wages and salaries	238	254	269	287	309	309	286	256	274	278	285	303	327	329
8	Military pay and allowances	7	7	7	8	8	8	8	8	8	9	9	9	9	32
9	Wartime military expenditure abroad		-	-	-	-	-	-	-	-	-	-	-	-	-
10	Business gross fixed capital formation	702	830	1,007	1,161	926	622	319	234	298	369	458	633	592	592
11	New residential construction	201	204	220	230	191	158	90	72	92	107	131	164	148	174
12	New non-residential construction	240	299	413	490	384	265	121	78	91	116	148	188	170	164
13	New machinery and equipment	261	327	374	441	351	199	108	84	115	146	179	281	274	254
14	Value of physical change in inventories	135	253	159	52	77	- 95	- 100	- 91	32	39	- 72	9	57	282
15		1,650	1,618	1,773	1,632	1,286	967	804	826	1,018	1,143	1,428	1,591	1,356	1,451
16	Payments to Canadian business	1,628	1,587	1,737	1,585	1, 242	934	781	804	990	1,110	1,387	1,550	1, 327	1,425
17	Payments to other sectors	22	31	36	47	44	33	23	22	28	33	41	41	29	26
18	Imports of goods and services	-1,522	-1,629	-1, 808	-1,945	-1,625	-1,142	- 901	- 828	- 948	-1.017	-1,183	1 409	-1 257	1 328
19	Receipts from Canadian business		j						- 692	Ì		-1,018 -			
20	Receipts from persons							- 64					- 108 -	- 110	- 105
21	Receipts from government	- 67	- 67 -										- 72		- 105
22	Residual error of estimate	157	53	41 -	- 27	- 24	- 114 -	- 73	- 77	- 101	99		- 70 -		- 28
23	Gross National Expenditure at Market Prices	5, 152	5, 549	6, 046	6, 134	5, 728	4, 699	3, 827	3,510	3, 984	4,315	4, 653	5, 257	5,278	5, 636

TABLE 20. Sector Accounts Consolidation, 1926-1956
Gross National Expenditure

-																	
1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	:
						1	(mill	ions of d	ollars)	1		1	1	1			No.
				1		]			1	1	1	-	1	1	1	1	
4,488	5,103	5,500	5, 808	6, 274	6, 969	8, 031	9, 090	10, 085	10, 923	12,026	13,460	14, 781	15, 592	16,175	17, 464	18,697	7 1
4,262	4,868	5, 237	5, 496	5, 905	6, 534	7,629	8,675	9,677	10,428	11, 481	12,802	14,014	14,753	15, 266	16, 465	17,609	2
139	144	136	130	135	147	168	191	230	262	276	318	356	396	433	447	474	3
87	91	127	182	234	288	234	224	178	233	269	340	411	443	476	552	614	4
						ļ I											
1,116	1,635	3,674	4,177	4,978	3,656	1,796	1,541	1,797	2,127	2,344	3,271	4,279	4,432	4,461	4,780	5,266	5
561	830	2, 466	2, 191	2, 149	1,374	769	795	946	1,140	1,277	1, 981	2,739	2,732	2,549	2,707	2,988	6
349	361	422	473	500	535	613	663	769	872	930	1,089	1,270	1,391	1,545	1,679	1,854	7
193	386	641	910	1,068	1, 117	340	83	82	115	137	201	270	309	367	394	424	8
. 13	58	145	603	1, 261	630	74	-	-	-	-	-	_	-	-	-	-	9
803		1,064	887	900	1,031	1,388	2, 085	2,619	3,032	3,348	3,959	4,451	4, 998	4,779	5,210	6,629	10
186	240	214	220	267	318	368	494	609	794	883	895	933	1,166	1,227	1,378	1,526	11
208	287	354	364	256	253	435	597	816	920	1,042	1,270	1,566	1,719	1,671	1,848	2, 550	12
409	558	496	303	377	460	585	994	1, 194	1, 318	1,423	1,794	1, 952	2, 113	1,881	1,984	2, 553	13
255	88	135	- 180	- 145	- 311	333	403	113	49	550	914	512	583	- 130	281	815	14
1,808	2,467	2,361	3,444	3,561	3,597	3,210	3,640	4, 050	4, 021	4,183	5, 089	5, 573	5,400	5,147	5, 764	6,339	15
1,780	2, 434	2, 329	3, 412	3, 529	3, 559	3, 176	3,606	4,013	3, 960	4, 122	5,003	5, 477	5,306	5,061	5,684	6, 270	16
28	33	32	32	32	38	34	34	37	61	61	86	96	94	86	80	69	17
1,629	-1, 976	- 2,307	- 2,917	- 3,569	- 2,910	- 2,877	- 3,621	· 3,633	- 3,853	- 4,513	- 5,613	- 5,400	- 5,843	- 5,574	- 6,443	- 7,697	18
1,458	-1,761	- 1,975	- 2,067	- 2,006	- 1,921	- 2,500	- 3,338	- 3,400	- 3,562	- 4,180	- 5,205	- 4,920	- 5,331	- 5,029	- 5,824	- 7,015	19
87	- 91	- 127	- 182	- 234	- 288	- 234	- 224	- 178	- 233	- 269	- 340	- 411	- 443	- 476	- 552	- 614	20
84	- 124	- 205	- 668	- 1,329	- 701	- 143	- 59	- 55	- 58	- 64	- 68	- 69	- 69	- 69	- 67	- 68	21
- 98	- 74	- 100	- 131	- 149	- 197	- 31	27	89	44	68	90	- 201	- 142	13	14	49	22
6, 743	8,328	10,327	11, 088	11,850	11, 835	11,850	13,165	15,120	16, 343	18, 006	21,170	23, 995	25, 020	24, 871	27, 070	30, 098	23



## Section B INDUSTRIAL DISTRIBUTION OF GROSS DOMESTIC PRODUCT AND OTHER AGGREGATES

TABLE 21, Gross Domestic Product at Factor Cost, by Industry, 1926-19561

No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
NO.							(m	illions o	of dollars	;)					
	Agriculture Forestry Fishing and trapping Mining, quarrying, and oil wells Manufacturing	886 66 41 155 1,063	883 69 39 168 1,148	932 72 41 189 1,255	698 78 39 218 1,341	628 61 30 182 1,246	343 40 20 142 966	326 27 16 109 728	276 30 17 133 648	374 38 21 183 786	425 44 23 213 882	403 55 25 270 987	485 82 25 328 1,170	558 54 23 303 1,174	570 76 25 335 1,260
-	Construction	204	210	242	292	253	205	113	73	81	99	117	154	154	156
8	Transportation Storage Communication Electric power, gas, and water utilities	632	663	740	733	672	569	475	437	489	508	553	594	595	647
11 12 13 14 15	Wholesale trade	172 396 492 165 632	195 440 528 177 663	204 495 513 189 765	204 520 601 205 757	274 516 568 224 745	196 429 514 225 661	164 327 457 205 535	135 274 442 183 474	139 307 410 203 485	159 347 423 206 507	170 386 452 212 528	184 424 460 227 574	212 449 483 246 595	204 445 530 266 608
16	Total	4,904	5, 183	5,637	5,686	5,399	4,310	3,482	3,122	3,516	3,836	4,158	4,707	4,846	5,122

<sup>1.</sup> For a reconciliation between Gross National Product at market prices and Gross Domestic Product at factor cost, see Table 4. For a discussion of domestic and national product aggregates see paragraphs 32-33 and 57. It should be noted that the data for wages, salaries, and supplementary labour income; and the inventory valuation adjustment are on an establishment basis, while the data for net income of unincorporated business; investment income; and capital consumption allowances and miscellaneous valuation adjustments are on an enterprise basis. For further details see paragraphs 180-182.

TABLE 22. Wages, Salaries, and Supplementary Labour Income, by Industry, 1926-1956

No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
							(m	illions o	of dollars	3)					
3	Agriculture Forestry Fishing and trapping Mining, quarrying, and oil wells Manufacturing	112 59 7 81 643	112 61 7 88 683	113 65 7 100 745	113 69 7 107 804	100 53 6 97 723	78 31 4 77 608	61 23 3 63 490	59 25 3 63 451	62 34 4 79 521	67 40 4 90 580	71 50 4 107 635	76 73 4 132 749	77 45 4 131 732	78 62 4 139 765
	Construction Transportation Storage Communication Electric power, gas, and water utilities	155 319 5 50 32	158 338 6 53 35	187 353 6 56 35	232 362 8 60 36	191 337 8 62 40	155 290 7 58 38	83 239 7 50 35	51 213 8 47 32	53 219 8 47 32	68 229 8 50 33	81 244 9 51 33	108 259 9 56 36	107 261 8 57 37	104 267 10 59 39
11 12 13 14 15	Wholesale trade Retail trade Finance, insurance, and real estate Public administration and defence Service	114 181 103 165 347	121 203 112 177 359	129 224 128 189 385	139 247 142 205 417	144 250 139 224 420	129 211 126 225 379	113 174 114 205 323	103 161 109 183 288	106 179 105 203 295	115 188 106 206 304	124 204 113 212 312	137 231 116 227 334	132 224 118 246 345	141 228 119 266 352
16	Total	2,373	2,513	2,722	2,948	2,794	2,416	1,983	1,796	1,947	2,088	2,250	2,547	2,524	2,633

<sup>1.</sup> Includes military pay and allowances.

TABLE 23. Investment Income, by Industry, 1926-19561

						me, ny	2114441741		0 2000						
No		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
							(m	illions o	of dollar	5)					
1 2 3 4	Agriculture Forestry Fishing and trapping Mining, quarrying, and oil wells	74 1 — 53	71 2 - 56	76 2 - 64	79 2 — 80	79 1 - 51	78 1 - 35	77 - - 23	72 1 - 50	68 1 - 80	64 1 101	60 1 — 134	55 2 - 163	54 1 — 138	52 2 - 161
5 6 7	Manufacturing Construction Transportation	202	241	280 5	290 5	170 5	86 2	10 - 1	65 - 1	125 1	139 1	201	276 3	224 3	333 4
8 9 10	Storage	131	128	167	142	96	52	47	44	83	87	103	115	97	124
11 12 13 14 15	Wholesale trade Retail trade Finance, insurance, and real estate Public administration and defence Service	24 55 235 — 41	32 64 255 - 45	36 76 209 — 107	37 70 268 — 53	24 48 245 — 53	10 28 215 — 47	- 3 191 - 40	13 190 - 38	9 29 168 — 40	16 36 178 — 39	17 44 192 — 40	27 53 189 - 45	24 45 205 — 46	36 61 251 
16	Total	820	898	1,022	1,026	772	564	390	472	604	662	792	928	837	1,071

<sup>1.</sup> The total of this table does not agree with the sum of corporation profits; and rent, interest, and miscellaneous investment income in Table 1. Data in Table 1 are on a national concepts basis, while the data in this table are on a domestic concepts basis. Interest and dividends paid to non-residents are included in this table and interest and dividends received from non-residents are excluded from this table. See paragraphs 32-33 and 57, for a discussion of domestic and national product aggregates.

TABLE 21. Gross Domestic Product at Factor Cost, by Industry, 1926-19561

1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
							(mi	llions of	iollars)								
693 100 29 363 1,622	680 114 42 391 2,220	1,160 131 51 388 2,889	961 155 59 362 3,198	1,335 166 64 315 3,171	1,160 208 77 325 2,960	1,331 267 82 364 2,816	1,422 279 64 446 3,310	1,706 284 80 525 3,909	1,600 252 80 547 4,303	1,716 353 99 653 4,714	2.382 445 103 794 5.474	2,421 369 88 777 6,150	2,048 370 81 782 6,453	1,482 406 89 887 6,291	1,727 445 82 1,051 6,755	1.960 503 89 1.207 7.534	1 2 3 4 5
188 723	263 902	306	302	247 863 26 140 226	311 877 31 151 221	440 865 29 169 229	557 918 22 187 275	689 1,012 37 202 305	796 1,019 37 222 341	874 1,123 40 258 392	921 1,362 48 311 441	1,134 1,453 58 349 490	1.356 1.554 66 373 545	1,325 1,499 60 422 594	1,388 1,698 65 470 606	1,624 1,929 77 524 661	6 7 8 9 10
238 484 543 443 648	289 579 574 644 726	307 644 665 951 781	307 703 678 1,260 842	376 791 726 1,440 895	386 877 737 1,514 969	471 1,033 806 782 1,107	602 1,121 817 554 1,283	623 1,222 1,002 629 1,474	717 1,449 1,144 740 1,638	774 1.534 1.355 809 1.764	836 1,545 1,497 995 1,972	1,045 1,927 1,724 1,196 2,163	993 2,024 1,902 1,314 2,345	999 2,075 2,113 1,478 2,493	1,056 2,250 2,350 1,584 2,642	1,212 2,412 2,608 1,733 2,863	11 12 13 14 15
6,074	7,424	9,344	10,041	10,781	10,804	10,791	11,857	13,699	14,885	16,458	19,126	21,344	22,206	22,213	24,169	26,936	16

Details by industry on capital consumption allowances and miscellaneous valuation adjustments; and the inventory valuation adjustment are not given ending further research, and Tables 22 to 24 are therefore not additive to the above data.

TABLE 22. Wages, Salaries, and Supplementary Labour Income, by Industry, 1926-1956

1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
							(mil	lions of	lollars)								
83 85 5 148 954	86 98 7 165 1,315	95 112 9 169 1,756	103 134 11 168 2,074	107 151 12 170 2,115	109 177 14 163 1,933	120 234 15 179 1,836	130 248 14 201 2,205	131 253 18 245 2,550	134 199 17 279 2,688	144 270 20 303 2,881	157 395 21 364 3,396	162 326 20 418 3,772	156 311 20 417 4,100	139 323 21 425 4,053	139 352 20 454 4,317	152 419 22 516 4,782	I 2 3 4 5
131 286 11 60 39	194 336 13 64 42	228 384 14 69 46	225 457 16 74 48	165 501 19 82 50	189 518 20 91 54	293 555 20 111 68	383 619 22 127 85	482 728 24 145 111	523 763 26 167 133	564 777 27 183 146	655 919 32 210 166	799 1,011 37 229 186	908 1,088 39 249 202	889 1,061 41 278 211	932 1,120 43 303 212	1,124 1,236 50 333 234	6 7 8 9
157 260 120 443 370	185 305 132 644 408	196 313 144 951 437	203 329 154 1,260 466	225 359 166 1,440 504	248 392 180 1,514 552	292 457 219 782 646	342 527 256 554 769	390 628 287 629 875	436 719 313 740 978	469 787 344 809 1,042	542 894 393 995 1,165	614 972 434 1, 196 1, 302	658 1,056 470 1,314 1,431	693 1,125 513 1,478 1,549	743 1,190 557 1,584 1,643	831 1,306 609 1,733 1,796	11 12 13 14 15
3,152	3,994	4,923	5,722	6,066	6,154	5,827	6,482	7,496	8,115	8,766	10,304	11,478	12,419	12,799	13,609	15,143	16

TABLE 23. Investment Income, by Industry, 1926-19561

1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
							(mil	lions of d	lollars)								
51 2 - 178	48 2 - 185	46 2 - 175	43 2 - 150	37 3 - 110	36 3 1 116	35 4 1 129	36 12 1 166	37 13 1 207	35 7 1 192	35 16 2 273	38 18 2 341	38 8 — 258	40 8 - 214	43 16 — 235	44 21 — 352	48 22 - 399	1 2 3 4
427 4 187	581 9 260	684 10 330	684 11 373	645 13 202 5 43 114	625 13 210 8 45 106	772 16 158 6 42 108	991 23 125 7 43 127	1,092 38 92 9 37 133	1.053 47 64 7 31 142	1,411 55 143 9 42 166	1,566 50 191 12 63 183	1,451 70 173 17 78 200	1,427 102 148 21 79 222	1,231 95 103 13 62 235	1,538 84 205 14 71 247	1,717 86 262 17 79 269	5 6 7 8 9
53 74 252 — 51	80 102 269 - 57	92 133 336 — 62	90 147 329 — 69	93 173 356 — 69	94 217 345 — 76	126 267 346 — 82	166 274 375 — 84	176 281 399 — 106	163 269 450 —	231 304 584 — 121	263 284 662 — 137	251 318 788 157	202 292 937 - 170	172 264 1,110 - 171	225 299 1,270 190	285 329 1,435 	11 12 13 14 15
1,279	1,593	1,870	1,898	1,863	1,895	2,092	2,430	2,621	2,572	3,392	3,810	3,807	3,862	3,750	4,560	5,156	16

<sup>2.</sup> This group includes ownership of dwellings.

TABLE 24. Accrued Net Income of Farm Operators from Farm Production and Net Income of Non-Farm Unincorporated Business, by Industry, 1926-1956

miterality		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
No.								(million	s of dol	lars)					
1	Agriculture	609	600	636	392	343	94	104	66	167	218	199	280	353	362
2	Forestry	4	4	4	4	3	3	2	2	3	4	6	8	8	10
3	Fishing and trapping	26	24	26	23	16	9	6	7	10	12	14	14	12	14
4	Mining, quarrying, and oil wells	5	5	5	5	5	5	5	5	5	6	6	7	7	7
5	Manufacturing	54	58	63	66	61	49	41	39	44	47	52	58	58	60
6	Construction	41	44	48	51	45	40	25	20	23	27	32	38	36	41
7	Transportation	9	11	13	15	16	14	14	14	15	16	20	22	22	25
8	Storage, communication, and electric power, gas, and water utilities	-	-	demin	-	-		-		ente	_	-	-	-	-
9	Retail trade	114	132	150	163	132	86	77	61	79	94	102	113	126	124
10	Wholesale trade	15	17	18	19	17	15	13	13	13	15	16	18	19	20
11	Finance, insurance, and real estate	16	19	27	31	24	16	14	16	14	13	18	19	18	16
12	Service	205	218	231	241	221	181	123	105	109	123	132	148	155	158
13	Total	1, 098	1, 132	1, 221	1, 010	883	512	424	348	482	575	597	725	814	837

TABLE 25. Business Gross Fixed Capital Formation, by Industry, 1926-19561

-		pr. n. v. n	process Conference record	principal de la company de la company de la company de la company de la company de la company de la company de	park IX realizables recovers and										
No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
								(millions	of dolla	ars)					
1 2	Agriculture	94	114	142	127	91	40	32	23	40	44	56	77	80	77
	Forestry	6	6	6	7	6	4	2	2	3	3	4	5	5	5
4	Mining, quarrying, and oil wells	17	18	32	46	45	22	7	9	11	31	31	33	34	31
5	Manufacturing <sup>2</sup>	129	179	215	225	163	95	47	42	50	67	83	140	115	98
6	Construction	14	15	25	33	28	11	4	2	2	7	7	12	9	11
7	Transportation <sup>3</sup>														
8	Storage														
9	Communication 4	174	204	246	344	295	221	95	55	62	73	93	141	135	120
10	Electric power, gas, and water utilities	}													
11	Trade	24	27	50	68	43	25	16	10	18	15	19	28	34	30
12	Finance, insurance and real estate 5	209	217	234	250	205	189	98	77	96	112	136	170	154	182
13	Service 6	35	50	57	61	50	35	18	14	16	17	29	27	26	38
14	Total	702	830	1,007	1, 161	926	622	319	234	298	369	458	633	592	592

<sup>1.</sup> This table is derived from Private and Public Investment in Canada, Outlook 1957 and similar reports for prior years (Department of Trade and Commerce). Additional detail has been provided by the D.B.S. General Assignments Division, and adjustments have been made to bring the data into line with National Accounting concepts, See reconciliation statement, Table 54. For an industrial distribution of total private and public investment, see Table 1 in the aforementioned and Commerce publications.

2. Includes outlay for wartime plant expansion in Canada by United Kingdom government, 1940-1943.

3. Includes United States government defence construction in Canada (Alaska Highway and Northern Staging Routes), 1942-1944.

Excludes United States government expenditures in connection with the wartime "Canol" project, which did not draw upon Canadian production.

Excludes Canadian government investment in merchant shipping, which is included with "government expenditure on goods and services".

TABLE 24. Accrued Net Income of Farm Operators from Farm Production and Net Income of Non-Farm Unincorporated Business, by Industry, 1926-1956

1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No
							(mi)	lions of	ioliars)				L				-
						į					*		1				-
483	463	929	720	1,088	906	1,056	1, 120	1,378	1, 248	1,322	1, 933	1, 959	1, 575	1,017	1, 261	1,468	1
13	16	18	22	26	29	33	33	32	41	60	49	47	41	48	62	60	2
17	28	35	40	43	53	54	35	46	45	56	58	41	36	40	33	37	3
7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	6	6	4
67	81	93	99	111	122	152	153	157	159	154	150	164	163	151	158	179	5
44	53	61	56	59	97	111	124	139	182	210	173	184	251	231	256	290	6
27	33	42	40	40	44	55	57	62	55	46	52	56	66	59	65	68	7
_	***	_	anna .			num.	_	num.		_		_	mine		_	_	8
143	171	172	185	205	220	275	325	332	360	342	412	430	454	444	501	558	9
22	26	29	31	34	38	45	65	78	81	69	63	57	62	52	54	56	10
15	17	19	20	23	28	31	30	33	35	41	53	51	50	55	64	66	11
176	205	225	247	263	280	309	344	383	424	454	503	536	559	570	594		12
1, 014	1, 100	1, 630	1,467	1,899	1,824	2, 128	2, 293	2, 647	2,637	2, 761	3, 452	3, 531	3, 263	2, 673	3, 054	3, 405	13

TABLE 25. Business Gross Fixed Capital Formation by Industry, 1926-19561

				DLE 80	. Бивш	ess uiu	SS FIAC	u Capita	al F Olini	ation, by	шиизи	J, 1320	-1930 -				
1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
							(mil	lions of d	ollars)								
99	111	91	60	102	127	185	278	352	443	482	525	562	557	400	426	496	1 2
6	7	8	6	14	12	13	32	28	26	34	58	39	34	46	63	75	3
29	32	22	16	17	16	27	42	70	96	114	164	205	253	278	336	536	4
274	430	446	277	211	280	337	528	573	536	502	793	973	969	822	947	1,349	5
12	17	25	23	19	30	33	52	59	55	71	66	73	91	97	174	191	6
101	150	100	040	107	120	123	186	201	214	224	296	418	476	430	384	665	7 8
131	159	189	246	197	138	47	86	108	117	113	128	144	169	192	219	240	9
						81	138	257	357	420	513	629	606	537	527	760	10
35	32	35	13	38	42	83	119	162	193	234	234	196	330	368	329	319	11
193	246	219	223	273	328	383	515	642	826	944	964	983	1, 244	1, 334	1,480	1, 651	12
24	51	29	23	29	58	76	109	167	169	210	218	229	269	275	325	347	13
803	1, 085	1,064	887	900	1,031	1,388	2, 085	2, 619	3, 032	3, 348	3, 959	4, 451	4, 998	4, 779	5, 210	6, 629	14

Excludes investment expenditures by the Canadian Broadcasting Corporation, which are included in "government expenditure on goods and services".
 Includes all new residential construction, (exclusive of government other than government business enterprises). See Table 2, line 6.
 Excludes government departmental expenditures, federal hospital, provincial hospital and school, and municipal school expenditures, which are included with "government expenditure on goods and services". Investment expenditures of government business enterprises (railways, power commissions, etc.) are included under appropriate industry headings.

TABLE 26. Value of Physical Change in Inventories, by Industry, 1926-1956

No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
							(1	millions	of dollar	s)	ſ	ı	I	1 1	
1	Agriculture	2	63	- 24	- 128	84	- 19	20	- 33	- 7	4	- 43	- 11	35	54
2	Forestry	- 1	5	- 1	5	- 10	- 4	- 2	7	6	- 1	5	14	- 25	10
3	Fishing and trapping	-	_				-	-	-		-		-	-	-
4	Mining, quarrying, and oil wells	1	2	1	4	-	2	- 3	_	2	- 2	10	-	3	2
5	Manufacturing	57	64	76	45	91	- 50	- 52	- 45	6	10	19	63	18	16
6	Construction	9	3	2	11	- 6	- 11	- 15	-	4	2	- 2	7	- 2	-
7	Transportation	)													
8	Storage	_ 2	5	2	9	- 5	6	- 4	- 10	- 1	2	- 2	1	- 2	3
9	Communication	}					and the state of t								
10	Electric power, gas, and water utilities	_	5	- 7	- 1	1	1	_	- 1	_	-	- 1	- 1	2	1
	Trade:														
11	Grain in commercial channels	- 21	27	57	34	- 48	- 22	7	10	20	1	- 97	- 93	43	127
12	Wholesale(excluding grain in commercial channels)	32	29	- 12	7	- 2	- 20	- 19	- 14	11	14	22	12	- 14	42
13	Retail	57	49	63	64	- 27	34	- 30	- 5	- 11	8	17	15	-	26
14	Finance, insurance, and real estate	}	1	2	2	1		- 2		2	1		2	. ,	1
15	Service	1	1	2	2	1				2	1	_	4		1
16	Total	135	253	159	52	77	- 95	- 100	- 91	32	39	- 72	9	57	282

TABLE 27. Corporation Profits, by Industry, 1926-1956

No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
							(m	illions o	of dollar	s)					
1	Agriculture	1													
2	Forestry	1	2	2	2	1	1		1	1	1	2	3	2	3
3	Fishing and trapping	j												1	
4	Mining, quarrying, and oil wells	53	55	64	81	53	36	23	50	81	103	135	164	139	161
5	Manufacturing	192	226	250	259	143	62	- 6	57	128	143	210	280	227	331
6	Construction	3	3	4	4	4	1	- 2	- 2	_	_	ng/m	2	2	3
7	Transportation	1													
8	Storage														
9	Communication	60	56	81	61	32	19	3	4	21	21	29	36	33	46
10	Electric power, gas, and water utilities	J													
11	Wholesale trade	12	19	21	21	9	- 2	- 10	- 8	2	11	14	25	20	31
12	Retail trade	36	39	42	32	14	_	- 18	- 2	12	16	21	28	20	32
13	Finance, insurance, and real estate	58	67	72	83	55	43	45	75	50	61	62	53	60	84
14	Service	5	7	12	11	10	3	- 3	- 4	-	1	2	7	6	7
15	Total <sup>1</sup>	420	474	548	554	321	163	32	171	295	357	475	598	509	698

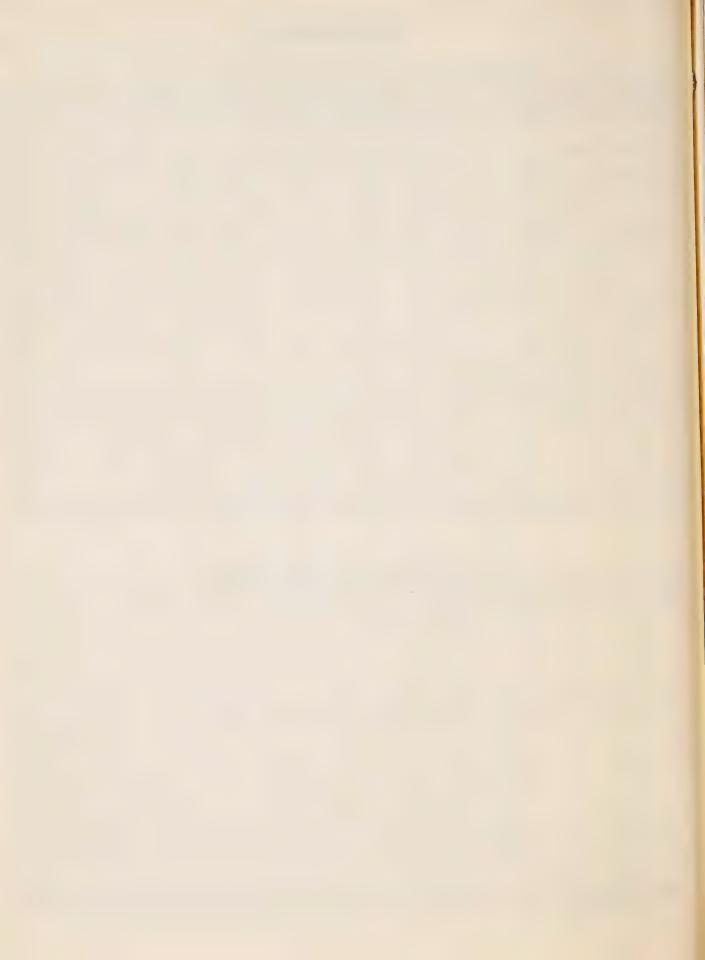
<sup>1.</sup> For an analysis of total corporation profits see Table 50. For an explanation of the contents of this total, see footnote 1, Table 50.

TABLE 28. Value of Physical Change in Inventories, by Industry, 1926-1956

					,								y #114451		7-1300				
1940	1941	1942		1943	15	944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
									(milli	ons of	dollars)					·			
	1		1		İ						1			1	I	1	1	1	
78	- 53	327	-	118	-	128	- 239	14	- 54	- 33	- 107	79	349	331	86	- 75	199	242	1
10	- 3	- 1	-	3	-	4	28	50	- 24	- 17	- 37	12	36	- 65	- 4	1	2	8	2
-	-	-		-		-	-	-	_	-	-	_	_	-	_	_	-	-	3
1	10	2	-	4	-	3	- 1	11	7	- 3	2	1	18	3	4	15	- 8	2	4
83	94	- 77		126		19	111	63	181	- 21	20	106	469	69	162	- 117	25	291	5
6	9	- 14	-	6	-	13	6	5	17	9	30	29	31	19	4	6	7	5	6
																		(	7
3	16	7		6		2	- 10	4	10	17	- 27	6	13	2	9	- 12	- 29	20	8
																			9
_	1	- 1	-	1		1	3	5	11	16	11	- 12	5	4	- 11	_	- 13	- 1	10
90	11	10	-	90	-	7	- 220	- 41	20	61	6	72	1	91	146	- 15	- 20	28	11
2	16	- 25	-	30	•	4	- 1	88	82	49	18	74	83	65	48	5	14	85	12
- 18	- 16	- 95	-	61	-	9	10	126	145	40	128	182	- 93	- 1	140	62	107	129	13
	3	2																	14
-	3	2		1		1	2	8	8	- (	5	1	2	- 6	- 1	_	- 3	6	15
255	88	135	-	180	•	145	- 311	333	403	113	49	550	914	512	583	- 130	281	815	16

TABLE 27. Corporation Profits, by Industry, 1926-1956

1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
							(milli	ons of do	llars)								
3	4	4	4	4	3	8	15	16	10	20	20	7	8	15	19	19	1 2
180	187	177	153	114	119	132	168	207	191	272	341	256	207	221	336	378	4
420	577	681	651	636	625	769	992	1,084	1,038	1,400	1,538	1, 413	1,396	1,186	1,501	1,655	5
3	8	9	9	10	9	13	22	36	44	52	46	66	97	89	75	73	6
				( 88	74	61	81	61	49	88	141	131	108	81	139	174	7
	405	100	100	6	7	6	6	8	6	8	10	15	19	11	12	13	8
77	125	168	183	25	27	26	24	24	18	26	47	59	62	39	42	50	9
				39	36	37	38	37	40	47	48	52	• 54	49	54	63	10
46	73	85	85	89	93	125	156	169	155	222	251	238	186	151	203	258	11
42	61	81	93	116	136	165	171	173	157	187	162	186	158	130	156	177	12
69	71	83	79	83	88	99	109	114	135	161	177	220	258	269	292	324	13
9	13	17	24	24	27	33	32	35	36	39	44	55	58	49	55	62	14
849	1,119	1, 305	1,281	1,234	1,244	1,474	1, 814	1, 964	1, 879	2,522	2, 825	2,698	2,611	2,290	2, 884	3,246	15



Section C
GEOGRAPHICAL DISTRIBUTION OF PERSONAL INCOME

TABLE 28. Personal Income, Geographical Distribution, 1926-19561

		1926	1927	1928	1929	1930	1931	1932	1933	1931	1935	1936	1937	1938	1939
No.							(m	illions o	f dollars	)					
1	Newfoundland														
2	Prince Edward Island	21	22	22	24	21	16	13	12	14	16	18	19	18	19
3	Nova Scotia	147	150	166	169	159	135	111	106	117	127	139	158	158	162
4	New Brunswick	108	1 09	114	121	113	94	77	73	79	85	94	106	105	111
5	Quebec	938	993	1,083	1,163	1,101	953	786	731	813	856	926	1,032	1.033	1, 085
6	Ontario	1,537	1,628	1,753	1,873	1,779	1,533	1,252	1,182	1,315	1,401	1,470	1,657	1,674	1,751
7	Manitoba	295	270	324	303	289	222	193	173	194	198	214	272	240	250
8	Saskatchewan	357	375	401	271	235	143	146	115	142	181	176	148	197	266
9	Alberta	293	350	324	290	271	199	169	145	184	187	188	255	271	262
10	British Columbia <sup>2</sup>	318	337	367	394	370	320	268	253	276	297	322	360	372	384
11	Yukon and Northwest Territories 2														
12	Foreign Countries 3	_		_	_		_			-	_	. –	-	-	-
13	CANADA	4,014	4,234	4,554	4,608	4,338	3,615	3,015	2,790	3,134	3,348	3,547	4,007	4, 068	4,290

<sup>1.</sup> Geographical distributions of the main components only of personal income are given in Tables 31 to 35 inclusive; these tables, therefore, do not add to the total of personal income.

TABLE 29. Personal Income per Person, Geographical Distribution, 1926-1956

No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
								(doll	ars)						
1	Newfoundland														
2	Prince Edward Island	241	253	250	273	239	182	146	133	154	174	194	204	191	202
3	Nova Scotia	285	291	322	328	309	263	214	202	220	237	256	288	285	289
4	New Brunswick	273	274	284	300	278	230	186	174	187	199	217	243	238	248
5	Quebec	360	374	399	420	390	332	269	246	270	280	299	329	325	336
6	Ontario	486	506	535	562	525	447	360	337	371	392	408	456	456	472
7	Manitoba	462	415	488	448	419	317	274	244	274	279	301	380	333	344
8	Saskatchewan	435	446	465	307	260	155	158	124	153	195	189	161	216	294
9	Alberta	482	553	492	424	383	272	228	193	243	244	243	329	347	333
10	British Columbia 1	515	530	561	586	537	453	372	346	372	395	423	465	470	475
11	Yukon and Northwest Territories 1														
12	CANADA	425	439	463	459	425	348	287	262	2 92	30 9	324	363	365	381

<sup>1.</sup> For the years 1926 to 1950 inclusive Yukon and Northwest Territories are included with British Columbia.

TABLE 28. Personal Income, Geographical Distribution, 1926-19561

940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
							(mill	ions of do	llars)								
									163	177	205	219	242	258	274	305	1
21	23	27	33	36	42	43	44	47	51	53	60	71	66	69	69	76	2
190	228	283	330	358	378	412	421	415	438	463	499	553	591	607	631	694	3
127	148	179	204	221	250	284	291	317	328	348	383	406	414	435	457	509	4
1,217	1,470	1,750	1,975	2,075	2,172	2, 339	2,606	2, 951	3,062	3,317	3,763	4, 152	4,469	4,647	4, 924	5, 423	5
2,038	2,494	2,965	3,303	3,510	3,656	3,738	4,017	4,570	4,904	5,285	6,093	6,749	7,209	7,397	7, 951	8,702	6
287	343	420	453	495	516	594	612	731	725	755	881	934	943	927	994	1,109	7
276	272	543	428	657	531	641	634	777	796	707	1,106	1, 209	1,136	809	1,003	1,212	8
310	323	506	447	579	559	686	729	880	892	919	1,228	1,328	1,373	1,309	1,401	1,592	9
432	511	645	754	783	832	922	1,016	1,206	1,273	1,398	∫1,568	1,728	1,844	1,911	2,059	2,264	10
											21	23	24	27	34	47	11
16	39	75	115	151	184	60	5	7	6	6	17	23	25	25	23	25	12
4, 914	5,851	7,393	8,042	8, 865	9,120	9,719	10, 375	11,901	12,638	13,428	15, 824	17,395	18,336	18,421	19, 820	21,958	13

For the years 1926 to 1950 inclusive Yukon and Northwest Territories are included with British Columbia.
 Includes receipts of income of Canadians temporarily abroad, including pay and allowances of Canadian armed forces abroad.

TABLE 29. Personal Income per Person, Geographical Distribution, 1926-1956

1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
							-	(dollars	)								
									472	. 504	568	586	632	653	675	735	1
221	242	300	363	396	457	457	468	505	543	552	612	710	653	683	690	768	2
334	394	479	545	586	611	678	685	664	696	726	776	847	891	902	924	999	3
281	324	386	441	479	535	594	596	637	646	680	742	772	777	806	835	917	4
371	441	516	571	593	610	645	702	779	789	836	928	995	1,047	1,059	1,090	1,172	5
544	658	763	844	886	914	913	962	1,069	1.120	1,182	1,325	1,410	1,459	1,446	1,510	1,610	6
394	470	580	627	681	710	817	828	980	958	983	1,135	1,170	1,166	1,126	1,185	1,305	7
307	304	640	511	786	637	770	758	927	957	849	1,329	1,434	1,319	927	1,142	1,376	8
392	406	652	569	717	692	854	884	1,030	1,008	1,007	1,308	1,365	1,357	1,239	1,284	1,418	9
526	612	727	822	825	861	898	951	1,090	1,120	1,204	1,346	1,434	1,478	1,476	1,534	1,618	10
											840	920	960	1,000	1,172	1,516	11
432	508	634	682	742	755	791	827	92.8	940	979	1,130	1,203	1,236	1,205	1,263	1,365	12

TABLE 30. Personal Disposable Income<sup>1</sup>, Geographical Distribution, 1926-1956

		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
No.							(milli	ons of	iollars)						
1	Newfoundland							10	10	13	15	17	19	18	19
2	Prince Edward Island	20	22	21	24	21	16	13	12	13					
3	Nova Scotia	145	148	164	167	157	134	108	104	115	125	136	155	156	159
4	New Brunswick	106	106	112	119	111	92	74	70	76	82	90	102	101	107
5	Quebec	926	979	1,067	1,145	1,082	938	770	714	797	836	900	1,000	999	1,048
6	Ontario	1,512	1,601	1,728	1,844	1,746	1,503	1,225	1,150	1, 287	1,363	1,424	1,603	1,619	1,703
7	Manitoba	292	267	321	298	284	218	190	169	190	193	209	267	235	244
8	Saskatchewan	356	373	399	269	234	142	145	113	141	179	175	146	195	264
9	Alberta	291	348	321	286	267	196	166	142	182	185	186	251	267	259
10	British Columbia <sup>2</sup>	313	331	362	388	365	313	260	247	269	290	315	352	363	375
11	Yukon and Northwest Territories 2				,										
12	Foreign Countries <sup>3</sup>	_				_			_	-	-	-	-	-	-
13	Canada	3,961	4, 175	4, 495	4,540	4, 267	3,552	2,951	2,721	3,070	3,268	3,452	3,895	3, 953	4, 178

TABLE 31. Wages, Salaries, and Supplementary Labour Income 1, Geographical Distribution, 1926-1956

-															
No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
							(mill	ions of	iollars)						
1	Newfoundland														
2	Prince Edward Island	8	8	9	10	9	8	7 .	6	6	7	7	8	8	9
3	Nova Scotia	100	102	108	114	106	90	74	67	74	30	88	101	102	107
4	New Brunswick	69	72	76	81	75	64	52	47	51	55	59	68	68	70
5	Quebec	598	640	699	762	727	632	519	472	512	550	594	673	667	683
6	Ontario	962	1,021	1,107	1,202	1, 141	98.9	814	739	804	865	936	1,064	1,061	1,103
7	Manitoba	166	175	188	201	189	160	129	114	121	126	132	145	137	143
8	Saskatchewan	119	124	134	143	134	114	92	81	86	90	94	103	97	101
9	Alberta	135	142	153	164	154	132	108	97	104	110	117	131	128	133
10	British Columbia <sup>2</sup>	209	222	241	263	251	219	180	165	181	196	214	245	247	252
11	Yukon and Northwest Territories <sup>2</sup>														
12	Foreign Countries	ento	oppose.	-	-			-	-	-	-	_	-	-	-
13	Canada	2,366	2,506	2, 715	2,940	2,786	2, 408	1, 975	1,788	1, 939	2,079	2,241	2,538	2,515	2, 001

<sup>1.</sup> Excludes military pay and allowances.

Personal disposable income consists of total personal income less personal direct taxes.
 For the years 1926 to 1950 inclusive Yukon and Northwest Territories are included with British Columbia.

TABLE 30. Personal Disposable Income<sup>1</sup>, Geographical Distribution, 1926-1956

-					,	,												
194	0	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
				,				(mill	ions of de	ollars)					1	1		
										157	171	197	207	227	245	260	289	1
	21	22	26	32	34	40	42	42	45	50	51	58	68	64	67	67	72	2
1	186	219	267	306	329	351	386	397	394	419	445	478	525	557	574	598	6 5 6	3
1	22	139	169	191	204	233	264	275	299	314	336	366	384	390	410	432	479	4
1,1	173	1,387	1,611	1,794	1,868	1,970	2, 141	2,410	2,754	2,876	3, 153	3,535	3,861	4,160	4,331	4,557	5,013	5
1,9	76	2,355	2,726	2,976	3,110	3, 284	3,382	3,661	4,202	4,557	4,949	5,621	6,144	6,550	6,729	7,279	7,918	6
2	280	330	400	423	456	475	551	574	690	689	716	834	876	881	864	931	1,036	7
2	274	266	535	415	637	504	616	603	744	760	678	1,064	1,150	1,073	752	946	1,146	8
3	106	312	490	419	543	521	646	688	832	838	874	1,166	1,241	1,280	1,217	1,309	1,486	9
4	21	486	599	673	695	749	835	929	1,112	1,183	1,309	1,438	1,571	1,674	1,745	1,895	2,073	10
												20	22	23	25	32	45	11
	16	39	75	115	151	184	60	5	7	6	6	17	23	25	25	23	25	12
4,7	75	5,555	6, 898	7,344	8, 027	8, 311	8, 923	9, 584	11,079	11, 849	12,688	14, 794	16, 072	16, 904	16, 984	18,329	20, 238	13

<sup>3.</sup> Taxes paid by Canadians temporarily abroad cannot be estimated and all direct taxes are allocated to provincial personal incomes only.

TABLE 31. Wages, Salaries, and Supplementary Labour Income 1, Geographical Distribution, 1926-1956

1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
							(milli	ons of do	llars)								
									106	116	138	151	170	177	188	210	1
	9 9	9	12	14	15	16	18	19	21	22	25	28	29	31	33	36	2
12	2 147	183	210	226	223	232	266	267	281	289	331	367	384	390	408	453	3
7	7 89	104	117	126	135	153	178	198	199	209	251	259	272	279	298	332	4
77	8 980	1,197	1,369	1,411	1,406	1,493	1,756	2,007	2,097	2, 237	2,634	2,908	3,127	3, 213	3, 402	3 ,790	5
1, 27	2 1,569	1,834	2,028	2,081	2,082	2,257	2,658	3,105	3, 346	3,624	4, 258	4,718	5, 066	5, 189	5, 526	6,140	6
15	8 187	206	218	242	256	291	330	383	410	437	499	551	600	604	634	699	7
11	2 124	132	144	163	176	204	219	243	263	278	315	¢350	411	439	4.50	501	8
14	7 171	185	208	233	244	289	323	386	438	486	562	643	751	784	842	948	9
28	4 332	431	505	501	499	550	649	804	836	928	{1,071	1,210	1,276	1,298	1, 401	1,563	10
											15	18	19	22	271	40	11
	-	1	1	1	1	2	2	2	3	3	4	5	5	6	6	7	12
2, 95	9 3, 608	4,282	4, 812	4, 998	5,037	5,487	6, 399	7, 414	8, 000	8, 629	10, 193	11,208	12,110	12,432	13,215	14, 719	13

<sup>2.</sup> For the years 1926 to 1950 inclusive Yukon and Northwest Territories are included with British Columbia.

TABLE 32. Net Income Received by Farm Operators From Farm Production<sup>1</sup>, Geographical Distribution, 1926-1956

	TABLE 34, Net medic Recent	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
No.							(1	nillions	of dollar	s)					
4	Newfoundland														
2	Prince Edward Island	7	8	7	7	5	2	1	2	2	3	4	4	3	4
3	Nova Scotia	12	12	13	12	13	9	7	10	10	11	12	14	14	9
4	New Brunswick	16	12	12	10	10	6	5	5	6	8	10	10	8	10
5	Quebec	81	77	84	79	64	46	32	32	44	46	57	61	64	75
6	Ontario	142	144	146	141	121	74	46	45	73	78	77	101	103	108
7	Manitoba	57	21	54	18	23	- 7	6	1	13	9	16	56	32	30
8	Saskatchewan	166	173	181	48	35	- 33	- 3	- 16	- 4	26	15	- 38	27	95
9	Alberta	98	142	101	54	52	10	13	4	32	27	19	62	80	63
10	Pritish Columbia <sup>2</sup>	18	18	22	22	16	10	8	12	12	14	16	17	17	18
11	Yukon and Northwest Territories <sup>2</sup>														
12	CANADA	597	607	62 0	391	339	117	115	95	188	222	226	287	348	412

<sup>1.</sup> This item differs from line 5 Table 1, in that it excludes the adjustment which has been made to take account of the accrued earnings arising out of the operations of the Canadian Wheat Board and the Canadian Co-operative Wheat Producers.

TABLE 33. Net Income of Non-Farm Unincorporated Business, Geographical Distribution, 1926-1956

No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
NO.		(millions of dollars)													
1	Newfoundland														
2	Prince Edward Island	2	2	2	3	3	2	2	1	2	2	3	3	3	2
3	Nova Scotia	19	19	26	24	20	16	12	10	12	14	16	19	18	18
4	New Brunswick	12	13	14	16	14	11	8	8	9	9	11	12	12	13
5	Quebec	122	131	142	153	137	107	83	72	81	91	101	115	115	122
6	Ontario	185	206	223	235	208	164	123	110	123	139	153	170	179	182
7	Manitoba	31	34	37	39	32	25	19	16	18	20	23	26	28	30
8	Saskatchewan	34	37	42	43	35	24	20	17	15	21	24	25	24	24
9	Alberta	29	31	36	39	33	25	19	17	20	22	24	27	28	30
10	British Columbia 1	55	59	63	66	58	44	34	31	35	39	43	48	54	54
11	Yukon and Northwest Territories 1														
12	CANADA	489	532	585	618	540	418	320	282	315	357	398	445	461	475

<sup>1.</sup> For the years 1926 to 1950 inclusive Yukon and Northwest Territories are included with British Columbia.

TABLE 32. Net Income Received by Farm Operators From Farm Production<sup>1</sup>, Geographical Distribution, 1926-1956

											,						
1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
		,					(mil)	lions of d	ollars)				<del></del>		i	1	140.
									2	2	2	2	2	2	2	2	1
4	4	8	9	8	10	8	9	12	13	12	15	21	12	12	12	13	2
10	10	14	18	18	14	21	15	17	16	17	20	18	18	17	14	17	3
12	14	19	23	23	22	23	23	27	26	24	23	28	19	21	17	24	4
86	99	126	136	157	138	155	163	217	198	205	253	233	232	217	225	229	5
110	140	222	193	245	242	246	268	344	342	324	423	410	371	293	332	306	6
38	51	92	95	99	70	104	109	171	131	106	172	151	103	62	79	124	7
86	59	271	152	326	170	242	240	354	344	235	582	614	484	145	280	442	8
85	64	196	107	191	124	190	213	286	234	189	398	381	300	190	188	243	9
19	22	28	37	43	46	45	46	50	53	42	57	58	58	50	48	48	10
											1 -	-	-	-	-	-	11
450	463	976	770	1,110	836	1,034	1,086	1,478	1,359	1,156	1,945	1,916	1,599	1,009	1,197	1,448	12

<sup>2.</sup> For the years 1926 to 1950 inclusive Yukon and Northwest Territories are included with British Columbia.

TABLE 33. Net Income of Non-Farm Unincorporated Business, Geographical Distribution, 1926-1956

				1												1	_
1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
							(mill	ions of de	ollars)								
									26	27	30	27	26	28	29	31	1
3	4	3	4	5	5	7	7	7	7	8	8	8	9	9	8	9	2
22	27	32	37	42	49	54	57	56	61	63	64	61	68	63	67	73	3
15	17	21	24	27	31	41	39	39	47	54	47	48	46	46	50	54	4
132	161	177	187	198	220	250	277	288	294	302	325	358	374	374	399	431	5
205	242	261	277	297	336	403	444	489	540	551	574	577	653	628	700	756	6
34	39	44	48	52	60	69	70	79	84	84	94	97	98	99	100	108	7
27	32	36	39	43	49	52	56	55	66	67	73	80	91	86	85	92	8
32	39	44	46	52	60	69	80	93	102	104	108	1 29	127	118	128	138	9
61	76	83	85	95	108	127	143	163	162	179	193	184	194	203	225	243	10
											3	3	2	2	2	2	11
531	637	701	747	811	918	1,072	1,173	1,269	1,389	1,439	1,519	1,572	1,688	1,656	1,793	1,937	12

TABLE 34. Interest, Dividends, and Net Rental Income of Persons, Geographical Distribution, 1926-1956

		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
No.							(mi	illions o	f dollars	5)					
1	Newfoundland														
2	Prince Edward Island	3	3	3	4	4	4	3	3	3	3	3	4	4	4
3	Nova Scotia	13	14	15	16	16	16	14	14	15	15	15	17	17	18
4	New Brunswick	9	10	10	11	11	11	10	10	11	11	11	11	12	13
5	Quebec	128	136	146	157	160	151	126	125	131	130	127	140	144	149
6	Ontario	220	231	248	266	271	261	217	219	236	236	228	255	261	273
7	Manitoba	35	33	38	36	35	32	26	28	28	28	26	30	29	31
8	Saskatchewan	33	36	38	30	23	17	16	13	15	15	17	9	14	21
9	Alberta	26	30	29	27	25	23	19	17	18	17	18	22	23	24
10	British Columbia 1	27	28	30	33	34	32	27	26	28	28	28	32	34	37
11	Yukon and Northwest Territories 1														
12	Foreign Countries	-		-	-	_	_	-	-	-	-	_	-	-	-
13	Canada	494	521	557	580	579	547	458	455	485	483	473	520	538	570

<sup>1.</sup> For the years 1926 to 1950 inclusive Yukon and Northwest Territories are included with British Columbia.

TABLE 35. Government Transfer Payments, Excluding Interest, Geographical Distribution, 1926-1956

		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
No.			L				(m	illions o	of dollar	s)					
1	Newfoundland														
2	Prince Edward Island		_	-	-	-	-		-	1	1	1	1	1	1
3	Nova Scotia	4	4	4	4	4	5	5	6	7	8	8	8	8	9
4	New Brunswick	2	2	2	2	3	3	3	3	3	3	4	5	5	5
5	Quebec	9	9	12	14	16	20	29	32	47	41	50	48	49	58
6	Ontario	30	31	33	35	45	50	55	72	82	88	81	74	76	78
7	Manitoba	6	7	8	9	10	13	14	15	15	15	17	16	15	15
8	Saskatchewan	5	5	6	7	9	22	21	20	31	29	26	48	35	24
9	Alberta	6	6	7	7	8	10	11	11	11	12	12	14	13	12
10	British Columbia 1	12	13	15	15	17	18	22	22	23	24	25	23	24	27
11	Yukon and Northwest Territories 1														
12	Foreign Countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	Canada	74	77	87	93	112	141	160	181	220	221	224	237	226	22 9

<sup>1.</sup> For the years 1926 to 1950 inclusive Yukon and Northwest Territories are included with British Columbia.

TABLE 34. Interest, Dividends, and Net Rental Income of Persons, Geographical Distribution, 1926-1956

		1			1			1 AHCUIII	- 01 1 01	00113, 0	CORTADI	iteal Di	SUIDULI	JII, 1340	-1930		
1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
							(mill	ions of do	ollars)	1			L	·			1
									8	11	11	12	13	16	16	18	1
4	4	3	3	3	3	3	4	3	4	4	5	5	5	5	5	6	2
19	20	21	23	24	27	27	31	28	29	38	33	34	41	47	51	56	3
14	14	15	16	17	18	19	20	24	24	27	27	25	28	34	36	39	4
157	164	170	179	182	199	199	240	257	268	328	330	353	400	440	475	528	5
291	297	298	313	314	342	345	400	407	428	522	554	603	663	751	845	945	6
34	38	38	41	43	44	47	53	55	55	68	66	68	72	82	86	95	7
21	18	44	42	57	45	46	54	54	54	62	73	88	73	54	75	78	8
27	25	36	38	43	43	50	57	62	60	74	93	94	103	107	124	138	9
39	42	48	54	58	69	81	100	108	113	134	140	135	152	182	196	220	10
											1	1	1	1	2	2	11
-	-	-	-	-	-		-	-	-	_	-		-	-	-	-	12
606	622	673	709	741	790	817	959	998	1, 043	1,268	1,333	1,418	1,551	1,719	1, 911	2, 125	13

TABLE 35. Government Transfer Payments, Excluding Interest, Geographical Distribution, 1926-1956

	T	T		T	1		1		1	T	T	T		T			_
1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
							(mill	ions of do	ollars)	-							
	1	1	}	1	I	1		1	1			ł		1			
					{				19	22	27	30	35	38	41	46	1
			1														
1	1	1	1	1	4	9	6	6	7	7	7	9	10	10	11	11	2
										4.0	40		0.5	-		<b>#</b> 0	
8	8	9	10	13	29	62	49	44	47	49	48	63	65	69	71	72	3
5	5	5	6	8	21	45	34	34	36	38	40	51	53	59	58	61	4
3	,				21	10	0.1	01			20						
51	48	51	. 56	70	140	250	205	225	246	285	274	352	389	443	466	490	5
67	63	64	73	82	180	375	269	266	280	292	306	441	464	525	538	543	6
15	13	14	12	15	34	75	53	48	50	65	54	70	73	78	89	88	7
	-						68	75	74	70	70	85	85	93	121	107	8
23	21	32	11	19	38	88	00	15	172	10	10	83	0.0	55	121	101	0
13	11	20	13	18	40	83	59	57	61	70	71	85	95	109	117	122	9
10	**	20	13	10	10	00											
24	24	26	28	33	58	114	95	103	126	130	132	170	190	208	216	222	10
											1						
									1		1	1	1	1	2	2	11
															1	1	
-	-	-	-		2	5	1	4	2	2	2	2	1	1	1	1	12
207	194	222	210	259	546	1,106	839	862	948	1,030	1,032	1,359	1,461	1,634	1,731	1,765	13
	1																



Section D
GOVERNMENT SUPPLEMENTARY TABLES

TABLE 36. Government Revenue and Expenditure, by Level of Government, 1926-1956 Revenue

				Reve	nue									
		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
No.			l				(millio	ns of do	llars)					
1	Direct taxes - persons	53	59	59	68	71	63	64	69	64	80	95	112	115
2	Federal	19	24	26	29	28	26	28	31	27	35	38	43	50
3	Provincial	29	30	28	33	37	31	29	31	30	38	51	64	59
4	Muhicipal	5	5	5	6	6	G	7	7	7	7	6	5	6
5	Direct taxes - corporations	34	38	45	48	40	33	32	37	52	65	83	101	94
6	Federal <sup>2</sup>	32	35	42	44	36	30	27	32	46	55	71	87	77
7	Provincial	2	3	3	4	4	3	5	5	6	10	12	14	17
												,		
	Withholding taxes													
8	Federal	-	_	-	*****	-	_	_	5	6	7	<b>9</b>	10	10
9	Indirect taxes	614	637	684	686	600	575	546	545	586	608	674	715	701
10	Federal	302	311	340	313	228	215	194	212	239	236	286	331	302
11	Provincial	65	68	75	83	82	79	81	80	85	100	111	116	1 26
12	Municipal	247	258	269	290	290	281	271	253	262	272	277	268	273
13	Investment income	117	122	140	136	103	72	66	65	80	93	119	116	101
14	Federal	17	14	20	8	- 23	- 45	- 40	- 36	- 25	- 24	- 7	- 13	- 29
15	Provincial	41	47	56	60	57	48	39	36	36	48	58	60	61
16	Municipal	59	61	64	68	69	69	67	65	69	69	68	69	69
17	Employer and employer contribution to the last													
1.1	Employer and employee contributions to social in- surance and government pension funds	17	20	22	27	29	26	23	21	23	26	28	34	33
18	Federal	3	4	4	5	5	5	5	4	4	4	5	5	5
19	Provincial	12	14	16	20	22	19	16	15	17	20	21	27	25
20	Municipal	2	2	2	2	2	2	2	2	2	2	2	2	3
21	Transfers from other levels of government	44	44	49	54	71	120	110	86	107	106	128	140	123
22	Provinces - from Canada	15	16	17	17	25	56	62	56	71	74	91	105	86
23	- from municipalities	6	4	5	7	10	10	10	10	10	10	10	7	7
24	Municipalities — from Canada	_	_	_	water		_	_	_	_	_	-	_	_
25	from provinces	23	24	27	30	36	54	38	20	26	22	27	28	30
						-	01	50	20	20	44	- 13	20	30
26	Total revenue	879	920	999	1,019	914	889	841	828	918	985	1, 136	1,228	1, 177
27	Federal	373	388	432	399	274	231	214	248	297	313	402	463	415
28	Provincial	170	182	200	224	237	246	242	233	255	300	354	393	381
29	Municipal	336	350	367	396	403	412	385	347	366	372	380	372	381
	1 For total covernment revenue.								- 11	500	012	500	012	301

<sup>1.</sup> For total government revenue and expenditure excluding inter-governmental transfers, see Tables 9 and 10.

TABLE 36. Government Revenue and Expenditure, by Level of Government, 1926-19561 Revenue

								]	Revenue									
1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
			1			,		(million	ns of doll	ars)			1	1	,	1		
112	139	296	495	698	838	809	796	791	822	789	740	1,030	1, 323	1,432	1,437	1, 491	1, 720	1
49	76	233	452	650	793	761	737	729	752	707	654	931	1,223	1,329	1,319	1,325	1,550	2
57	57	56	40	45	42	45	56	59	66	78	82	94	95	97	112	159	162	3
6	6	7	3	3	3	3	3	3	4	4	4	5	5	6	6	7	8	4
115	327	510	629	640	598	599	654	702	687	718	983	1,416	1,384	1,220	1, 082	1,280	1,430	5
98	291	477	624	636	594	596	652	631	568	588	837	1, 227	1,275	1,144	1,018	1,218	1,353	6
17	36	33	5	4	4	3	2	71	119	130	146	189	109	76	64	62	77	7
10	13	24	29	27	27	29	29	35	41	47	54	56	55	54	58	67	68	8
717	884	1, 129	1,179	1,329	1,379	1,266	1,506	1,785	1, 840	1,885	2,063	2,597	2,817	3, 021	3,033	3,317	3,722	9
310	453	674	750	889	922	782	957	1,136	1,086	1,048	1,115	1,495	1,595	1,697	1,612	1,744	1,972	10
130	149	166	137	141	153	179	222	289	351	392	449	527	567	613	655	735	839	11
277	282	289	292	299	304	305	327	360	403	445	499	575	655	711	766	838	911	12
121	165	211	269	348	367	430	404	375	386	419	471	534	617	65.1	687	742	819	13
14	21	59	97	169	170	196	149	109	101	123	146	180	231	232	23	267	315	14
65	71	78	95	101	114	150	173	179	187	195	211	226	245	271	289	295	319	15
70	73	74	77	78	83	84	82	87	98	101	114	128	141	148	164	180	185	16
35	39	69	114	128	133	136	149	181	224	239	256	336	375	410	422	449	490	17
6	6	31	64	70	76	74	78	100	129	141	159	221	247	270	287	310	347	18
26	30	35	47	55	53	58	66	76	89	92	90	108	120	131	126	129	133	19
3	3	3	3	3	4	4	5	5	6	6	7	7	8	9	9	10	10	20
118	106	92	194	195	220	227	260	300	288	354	433	469	596	669	704	798	842	21
79	70	54	150	148	155	157	174	192	150	187	250	257	365	409	428	443	472	22
7	7	7	7	7	7	7	7	7	9	10	11	13	13	15	15	23	21	23
-	-	_	_	_	-	-	_	-	-	-	1	2	3	3	2	7	9	24
32	29	31	37	40	58	63	79	101	129	157	171	197	215	242	259	325	340	25
1 220	1, 673	2,331	2,909	3,365	3,562	3,496	3,798	4,169	4,288	4,451	5,000	6,438	7, 167	7,457	7, 423	8, 144	9, 091	26
1,228					2, 582	2,438	2,602	2,740	2,677	2,654	2,965	4,110	4,626	4,726	4,528	4,931	5,605	27
459	860	1,498	2,016	2,441		599	700	873	971	1,084	1,239	1,414	1,514	1,612	1,689	1,846	2,023	28
381	420	429	481	501	528		496	556	640	713	796	914	1,027	1,119	1,206	1,367	1,463	29
388	393	404	412	423	452	459	480	1300										

<sup>2.</sup> For details of tax collections and tax liabilities, see Table 50.

TABLE 37. Government Revenue and Expenditure, by Level of Government, 1926-19561 Expenditure

				, Jy ber										
No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
					-		(millio	ns of do	llars)					
1	Goods and services	488	531	560	640	721	688	584	462	503	542	544	619	686
2 3 4	Federal <sup>2</sup> Provincial Municipal	121 89 278	133 99 299	138 118 304	159 137 344	172 162 387	147 156 385	119 128 337	115 97 250	127 129 247	159 136 247	153 138 253	151 202 266	176 218 272
5	Transfer payments	305	311	318	328	356	394	435	464	504	501	501	510	492
6 7 8	Federal Provincial Municipal	169 68 68	170 71 70	169 77 72	165 88 75	170 104 82	173 132 89	182 156 97	186 178 100	186 214 104	181 219 101	185 218 98	1 92 229 89	182 221 89
9	Subsidies	2	3	5	5	7	18	9	8	8	23	14	10	62
10 11	Federal Provincial	2	3	5 -	5	6	18	8	-8	8 -	22 1	13	9	61
12	Transfers to other levels of governments	44	44	49	54	71	120	110	86	107	106	128	140	123
13 14	Canada — to provinces	15	16	17	17	25	56	62	56	71	74	91	105	86
15 16	Provinces - to municipalities  Municipalities - to provinces	23 6	24 4	27 5	30 7	36 10	54 10	38 10	20 10	26 10	22 10	27 10	28 7	30 7
17	Total expenditure	839	889	932	1,027	1,155	1,220	1,138	1,020	1,122	1,172	1,187	1,279	1,343
18 19 20	Federal Provincial Municipal	307 180 352	322 194 373	329 222 381	346 255 426	373 303 479	394 342 484	371 323 444	365 295 360	392 369 361	436 378 358	384 361	457 460 362	505 470 368
21	Deficit (-) or surplus (+)	40	31	67	- 8	- 241	- 331	- 297	- 192	- 204	- 187	- 51	- 51	- 166
22 23 24	Federal <sup>3</sup>	66 - 10 - 16	66 - 12 - 23	103 - 22 - 14	53 - 31 - 30	- 99 - 66 - 76	- 163 - 96 - 72	- 157 - 81 - 59	- 117 - 62 - 13	- 95 - 114 5	- 123 - 78 14	- 40 - 30 19	- 67 10	- 90 - 89 13
25	Total expenditure minus deficit (or plus surplus)	879	920	999	1,019	914	889	841	82.8	918	985	1,136	1,228	1,177
26 27 28	Federal Provincial Municipal	373 170 336	388 182 350	432 200 367	399 224 396	274 237 403	231 246 412	214 242 385	248 233 347	297 255 366	313 300 372	402 354 380	463 393 372	415 381 381

For total government revenue and expenditure excluding inter-governmental transfers, see Tables 9 and 10.
 Defence and war expenditures included in these figures are as follows:

							Defence						
1	926	1927	1928	1929	1930	1931 (millio	1932 ns of do	1933	1934	1935	1936	1937	1938
	15	19	20	22	24	18	14	20	22	27	25	33	36

It should be noted that the "war" series is based on the definition of "war expenditure" followed by the Comptender of the Treasury in the Public Accounts and includes expenditures of the Departments of National Defence, Munitions and Supply and many other departments for war or related purposes. The "defence" series includes only expenditures by the Departments of National Defence and Defence Production, and consequently is discontinuous with respect to the "war series" after the year 1946.

TABLE 38. Direct Taxes - Persons, 1926-1956

1937 19	1938
41	47
- 2	-3
43	50
12	12
12	13
-3	
64	59
-	
3	4 2
5	6
112	115
	41 -2 43 12 12 12 37 -3 64 3 2 5 112

<sup>1.</sup> This item excludes estimated refundable portion of personal income tax and excess profits tax, and includes the excess profits tax.

	1941	1942	1943	1944 (million	1945	1946	1947	1948	1949	
Refundable portion: personal income tax		58	135	72						
Excess profits tax (excluding refundable portion)	3	9	3 16	20	4 24	1 28	19	4	4	

TABLE 37. Government Revenue and Expenditure, by Level of Government, 1926-1956 Lexpenditure

_																			
1	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
									(milli	ons of do	llars)	1			1	·	1		
	683	1,116	1,635	3,674	4,177	4,978	3,656	1,796	1,541	1,797	2,127	2,344	3,271	4,279	4,432	4 461	4 700	W 000	
	213	680	1,187	3,235	3,718	4,470	3,097	1,077	629	673	870	977	1.702	2,489	2,559	4,461 2,449	4, 780 2, 498	5,266 2,671	2
	189 281	155 281	164 284	148 291	155 304	172 336	198 361	283 436	382 530	467 657	510 747	535 832	631 938	724	695	747	842	1,051	3
	504	480	4.85	532	581	682	1,058	1,660						1	1,178	1,265	1,440	1,544	4
	190	198	218	270	315	408	761	1,368	1,398	1,420	1,520	1,575	1,585	1,939	2,071	2,303	2,401	2,483	5
	228 86	203	194 73	192 70	200	212	238	236	277	339	414	1,042 467	1,004 504	1,420 428	1,507 468	1,665	1,720	1,740	6 7
							59	56	57	58	62	66	77	91	96	112	120	138	8
-	17	<b>53</b> 52	74	93 87	211	267	262	236	177	75	77	63	128	100	110	86	79	121	9
-	1	1	69 5	6	205	261	257	231	171	71	73 4	60	124	96	106	84	75	118	10
	118	106	92	194	195	220	227	260	300	288	354	433	469	596	669	704	798		
	79	70	54	150	148	155	157	174	192	150	187	250	257	365	409	428	443	842 472	12
	32	29	31	37	40	58	63	79	101	129	157	1	2	3	3	2	7	9	14
	7	7	7	7	7	7	7	7	7	9	10	171 11	197	215 13	242 15	259 15	325 23		15
1	,288	1,755	2,286	4,493	5,164	6,147	5,203	3, 952	3,416	3,580	4,078	4,415	5,453	6, 914	7,282	7,554	8,058	8, 712	17
	464	1,000	1,528	3,742	4,386	5,294	4,272	2,850	2,056	1.917	2,174	2,330	3,089	4,373	4,584	4,628	4,743	5,010	18
	450 374	388 367	394 364	383 368	401 377	448 405	504 427	603 499	766 594	939 724	1,085	1,176	1,336	1,371	1,409	1,534	1,732	1,999	19
	60	- 82	45	-1,584	-1,799	-2,585	-1,707	- 154	753	708	373	5 85	985	253	175	- 131	86	379	21
-	5	- 140	- 30	-1,726	-1,945	-2,712	-1,834	- 248	684	760	480	635	1,021	253	142	- 100	188	595	22
-	69	32 26	35 40	98 44	100 46	80 47	95 32	97	107	32 - 84	- 1 - 106	63	78	143	203 - 170	155	114	24	23
-4																			
1	,228	1,673	2,331	2,909	3,365	3,562	3,496	3,798	4,169	4,288	4,451	5,000	6,438	7,167	7, 457	7,423	8,144	9,091	25
	459 381	860 420	1,498 429	2,016 481	2,441	2,582 528	2,438	2,602 700	2,740 873	2,677 971	2,654 1,084	2, 965 1, 239	4,110	4,626 1,514	4,726 1,612	4,528 1,689	4,931 1,846	5,605 2,023	26 27
	388	393	404	412	423	452	459	496	556	640	713	796	914	1,027	1,119	1,206	1,367	1,463	28

			V	ar								Defe	ence				
1939	1940	1941	1942 millions	1943 of dollar	1944 (s)	1945	1946	1947	1948	1949	1950	1951 aillions o	1952 f dollars)	1953	1954	1955	1956
70	543	1,046	3,100	3,565	4,299	2,891	847	227	236	361	493	1,157	1,800	1,907	1,727	1,756	1,800

<sup>3.</sup> For the difference between this item and the conventional budgetary surplus or deficit, see reconciliation, Table 53.

TABLE 38. Direct Taxes - Persons, 1926-1956

1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
									(millions	of dollars	)							
46 - 3	71 - 5	226 2 5	432 15 5	630 14 6	771 16 6	733 22 6	711 20 6	695 30 4	717 29 6	674 26 7	612 35 7	890 35 6	1,177 39 7	1,287	1, 277 41 1	1,269 55 1	1,461 88 1	1 2 3
49	76	233	452	650	793	761	737	729	752	707	654	931	1,223	1,329	1, 319	1,325	1,550	4
12 13 28 - 4	16 14 23 - 4 57	9 15 27 - 5 56	1 12 22 - 5	1 14 24 - 6 45	1 12 23 - 6 42	13 25 - 7 45	14 34 - 8 56	17 31 4 7	19 29 10 8	3 21 29 15 10	24 31 18 9	28 34 21 11	29 34 21 11	31 33 20 13	19 32 37 9 15	28 36 72 9 14	34 45 58 10 15	5 6 7 8 9
4 2 6 112	4 2 6 139	4 3 7 296	3 3 495	- 3 3 698	- 3 3 838	- 3 3 809	3 3 796	3 3 791	4 4 822	- 4 4 789	- 4 4 740	5 5 1,030	5 5 1,323	6 6 1,432	6 6 1,437	7 7 1,491	8 8 1,720	11 12 13 14

<sup>2.</sup> Personal share only. The business share is treated as an indirect tax.

TABLE 39. Direct Taxes - Corporations, 1926-1956

		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
Nos							(millio	ns of do	llars)					
	Federal:													
1	Income 1	32	35	42	44	36	30	27	32	46	55	71	87	77
İ	Provincial:													
	Income:													
2	Provinces under taxation agreements 2													
3	Provinces not under taxation agreements (excluding tax on mining and logging profits)	1	2	2	3	3	2	4	4	4	7	9	10	12
4	Tax on mining and logging profits	1	1	1	1	1	1	1	1	2	3	3	4	5
5	Total	2	3	3	4	4	3	5	5	6	10	12	14	17
6	GRAND TOTAL	34	38	45	48	40	33	32	37	52	65	83	1 01	94

TABLE 40. Indirect Taxes, 1926-1956

-								1						
		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
No														
							(millio	ns of do	llars)					
	Federal:				1			1	i	1				1
1	Banks and insurance companies	2	3	2	1	2	1	2	2	2	2	2	2	2
2	Customs import duties	142	157	187	179	131	104	70	66	77	74	84	93	81
3	Excise duties	49	57	64	65	58	49	38	35	43	44	46	52	51
4	Excise taxes	106	90	83	63	35	60	82	107	112	113	152	181	166
5	Miscellaneous	3	4	4	5	2	1	2	2	5	3	2	3	2
6	Total	302	311	340	313	228	215	194	212	239	236	286	331	302
	Provincial:													
7	Amusement	5	5	5	5	4	4	4	3	3	5	4	3	3
8	Corporation tax (not on profits)	12	12	12	13	13	15	17	16	15	17	19	18	24
9	Gasoline	6	8	13	18	24	23	26	26	28	32	35	40	43
10	Licences, fees, and permits	6	6	7	9	7	7	6	7	7	7	9	8	8
11	Motor vehicle licences and permits 1	7	8	9	10	10	9	10	10	11	12	13	14	1.3
12	Miscellaneous taxes on natural resources	16	17	16	15	14	12	9	8	11	14	15	17	20
13	Real and personal property	8	6	6	6	5	4	4	4	4	4	5	4	5
14	Retail sales tax (including liquor and tobacco).		_	_	_			_		_	_	1	2	2
15	Miscellaneous	5	6	7	7	5	5	5	6	6	9	10	10	8
16	Total	65	68	75	83	82	79	81	80	85	100	111	116	126
	Municipal:													
17	Amusement	1	1	1	1	1	1	1	1	1	1	1	1	1
18	Licences, fees, and permits	10	10	10	11	11	9	7	5	6	6	6	7	7
19	Real and personal property	219	229	239	257	257	251	244	230	237	242	245	236	240
20	Retail sales tax		_	-	_	_	_	-		_	4	4	4	4
21	Miscellaneous	17	18	19	21	21	20	19	17	18	19	21	20	21
22	Total	247	258	269	290	290	281	271	253	262	272	277	268	273
23	GRAND TOTAL	614	637	684	686	600	575	546	545	586	608	674	715	701

<sup>1.</sup> Business share only. The personal share is treates as a direct tax.

TABLE 39. Direct Taxes - Corporations, 1926-1956

										-								
1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
								(millio	ons of dol	lars)								
98	291	477	624	636	594	596	652	631	568	588	837	1, 227	1, 275	1, 144	1,018	1, 218	1,353	1
1	H							7	28	28	28	39	25	-	-	_	-	2
13	31	29	1		1	-		61	86	95	110	139	73	64	53	51	61	3
4	5	4	4	4	3	3	2	3	5	7	8	11	11	12	11	11	16	4
17	36	33	5	4	4	3	2	71	119	130	146	189	109	76	64	62	77	5
115	327	510	629	640	598	599	654	702	687	718	983	1,416	1,384	1,220	1,082	1,280	1,430	6

<sup>2.</sup> Collected by federal government on behalf of provinces under Dominion - Provincial taxation agreements.

TABLE 40. Indirect Taxes, 1926-1956

1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
								(millio	ns of dol	lars)								
					_								5	13	14	14	15	
2	2	2	7	6	7	8	8	9 301	224	230	257	355	369	416	387	452	545	1 2
91 58	1 26 80	143	1 25 1 37	154 137	139	104 181	209 195	196	207	212	226	233	245	228	225	242	267	3
156	241	421	477	586	622	481	537	623	642	590	620	889	960	1.023	974	1,028	1, 131	4
3	4	4	4	6	6	8	8	7	10	12	8	14	16	17	12	8	14	5
310	453	674	750	889	922	782	957	1,136	1,086	1,048	1,115	1,495	1.595	1.697	1,612	1,744	1, 972	6
310	433	014	130	003	CHIE A	100	501	1,100	2,000	2,010	1,110	2,100						
3	3	3	3	4	6	7	8	8	17	21	19	20	21	23	23	21	21	7
18	20	17	_	_	_	1	1	15	20	21	23	25	20	16	18	18	19	8
54	57	61	49	47	48	59	75	112	126	140	158	181	193	219	235	260	288	9
8	8	9	10	9	10	13	16	18	18	24	25	20	20	21	22	23	24	10
14	14	17	14	16	19	19	24	29	32	36	42	45	49	51	56	61	78	11
15	19	23	25	24	27	30	37	39	47	40	51	72	90	83	83	103	120	12
6	4	5	5	7	7	6	6	4	5	5	6	8	8	7	7	9	8	13
3	13	19	21	22	23	26	32	38	57	73	87	102	110 56	124 69	139	158 82	191	14
9	11	12	10	12	13	18	23	26	29	32	38	54						
130	149	166	137	141	153	179	222	289	351	3 582	449	527	567	613	655	735	839	16
					,													
1	1	1	1	1	1	2	2	2	3	3	2	2	3	3	3	3	3	17
7	7	8	8	8	8	8	9	10	12	13	15	16	18	20	22	21 683	21 743	18
242	245	250	251	258	262	261	277	302	335	369	407	468	536 30	581 34	626	43	49	20
5	6	7	8	8	8	9	11	14	15	16 44	24 51	28 61	68	73	78	88	95	21
22	23	23	24	24	25	25	28	32	38								911	
277	282	289	2 92	299	304	305	327	360	403	445	499	575	655	711	766	838	911	22
717	884	1,129	1,179	1,329	1,379	1,266	1,506	1,785	1,840	1,885	2,063	2,597	2,817	3,021	3,633	3,317	3,722	23

TABLE 41. Government Investment Income, 1926-1956

No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
140.							(millio	ns of do	llars)					
	Federal:					-								
1	Interest on government-held public funds	5	5	5	5	6	6	7	7	6	7	7	7	8
2	Interest on loans, advances and investments	10	12	13	15	12	10	12	12	12	11	12	14	11
3	Profits (net of losses) of government business enterprises	2	- 3	2	- 12	- 41	- 61	- 59	- 55	- 43	-42	- 26	- 34	- 48
4	Total	17	14	20	8	- 23	- 45	- 40	- 36	-25	- 24	- 7	- 13	- 29
	Provincial:													
5	Interest on government-held public funds	4	4	4	5	5	6	6	7	8	8	9	9	10
6	Interest on loans, advances and investments	19	20	20	21	23	19	18	21	17	22	20	18	18
7	Profits (net of losses) of government business enterprises	18	23	32	34	29	23	15	8	11	18	29	33	33
8	Total	41	47	56	60	57	48	39	36	36	48	58	60	61
	Municipal:		0	10	11	11	11	11	10	12	12	11	11	11
9	Interest on government-held public funds	9	9	10										
10	Interest on loans, advances and investments	16	17	17	17	18	18	17	18	17	16	16	16	15
11	Profits (net of losses) of government business enterprises	34	35	37	40	40	40	39	37	40	41	41	42	43
12	Total	59	61	64	68	69	69	67	65	69	69	68	69	69
13	GRAND TOTAL	117	122	140	136	103	72	66	65	80	93	119	116	101

TABLE 42. Employer and Employee Contributions to Social Insurance and Government Pension Funds, 1926-1956

No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
							(millio	ns of do	llars)		hanner			
	Federal:													
1	Public service pensions	3	4	4	5	5	5	5	4	4	4	5	5	5
2	Unemployment insurance	-	-	-	-		-	-	-	-	_		-	-
3	Total	3	4	4	5	5	5	5	4	4	4	5	5	5
	Provincial:													
4	Public service pensions	2	2	3	3	4	5	5	5	5	5	5	5	5
5	Workmen's compensation	10	12	13	17	18	14	11	10	12	15	16	22	20
6	Industrial employees' vacations	_	-	_	-	-	-	_		_	_	_	-	-
7	Total	12	14	16	20	22	19	16	15	17	20	21	27	25
	Municipal:													
8	Public service pensions	2	2	2	2	2	2	2	2	2	2	2	2	3
9	GRAND TOTAL	17	20	22	27	29	26	23	21	23	26	28	34	33

TABLE 41. Government Investment Income, 1926-1956

1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
								(milli	ons of do	llars)								
7	6	7	8	10	14	16	17	19	20	23	27	33	51	56	63	68	74	1
12	13	20	30	37	40	46	49	39	51	81	62	76	86	58	69	60	65	2
- 33	2	32	59	122	116	134	83	51	30	19	57	71	94	118	102	120	170	
						201	00	01	30	19	31	81	94	118	102	139	176	3
- 14	21	59	97	169	170	196	149	109	101	123	146	180	231	232	234	267	315	4
10	11	11	12	13	14	16	16	17	19	22	25	26	29	34	37	36	37	5
17	16	16	15	16	16	20	19	20	19	21	22	26	28	36	42	43	49	6
38	44	51	68	72	84	114	138	142	149	152	164	174	188	201	210	216	233	7
									2.10	102	201	212	200	201	210	210	200	
65	71	78	95	101	114	150	173	179	187	195	211	226	245	271	289	295	319	8
11	10	10	10	10	9	10	9	9	8	8	8	8	7	7	7	7	8	9
14	14	13	13	13	12	11	10	9	10	10	11	12	14	15	19	20	23	10
45	49	51	54	55	62	63	63	69	80	83	95	108	120	126	138	153	154	11
																		1
70	73	74	77	78	83	84	82	87	98	101	114	128	141	148	164	180	185	12
121	165	211	269	348	367	430	404	375	386	419	471	534	617	651	687	742	819	13

TABLE 42. Employer and Employee Contributions to Social Insurance and Government Pension Funds, 1926-1956

1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
								(milli	ons of do	llars)								
6	6	7	9	10	11	12	14	20	32	35	41	69	93	111	129	145	163	1
-	_	24	55	60	65	62	64	80	97	106	118	152	154	159	158	165	184	2
6	6	31	64	70	76	74	78	100	129	141	159	221	247	270	287	310	347	3
5	6	6	8	9	10	12	14	17	20	23	27	30	35	41	41	41	41	4
21	24	29	39	46	43	45	50	56	63	63	54	66	72	76	71	72	76	5
	-	_	tonic .	_	1940	1	2	3	6	6	9	12	13	14	14	16	16	6
26	30	35	47	55	53	58	66	76	89	92	90	108	120	131	126	129	133	7
3	3	3	3	3	4	4	5	5	6	6	7	7	8	9	9	10	10	8
35	39	69	114	128	133	136	149	181	224	239	256	336	375	410	422	449	490	9

TABLE 43. Government Expenditure on Goods and Services, 1926-1956

		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
No.							(millic	ons of do	llars)					
							(1122220					1		
	Federal:						76	68	64	68	73	73	77	79
1	Wages, salaries, and supplementary labour income	65	69	73	77	83	76	00	0.2	8	9	9	9	0
2	Military pay and allowances	7	7	7	9	8	8	42	43	51	77	71	65	88
3	Other purchases of goods and services 1	49	57	58	74	81	63	43	7-	127	159	153	151	176
4	Total <sup>1,2</sup>	121	133	138	159	172	147	119	115	121	133	133	131	110
	Provincial:									mr.e	0.0	70	0.1	05
5	Wages, salaries, and supplementary labour income	45	51	57	65	73	79	68	55	71	66	70	81	97
6	Other purchases of goods and services	44	48	61	72	89	77	60	42	58	70	68	121	121
7	Total <sup>2</sup>	89	99	118	137	162	156	128	97	129	136	138	202	218
	Municipal:													
8	Wages, salaries, and supplementary labour income	128	134	139	145	153	154	150	137	135	139	142	145	151
9	Other purchases of goods and services	150	165	165	199	234	231	187	113	112	108	111	121	121
10	Total <sup>2</sup>	278	299	304	344	387	385	337	250	247	247	253	266	272
					040	70.1	600	584	462	503	542	544	619	666
11	GRAND TOTAL	488	531	560	640	721	688	384	404	303	342	344	913	

<sup>1.</sup> Includes purchases of government commodity agencies and the defence production revolving fund. Also includes for the following years:

	1940	1941	1942	1943 (milli	1944 lons of do	1945 ollars)	1946	1947	1948
UNRRA, mutual aid and military relief	_	-	1,002	518	960	858	97	38	23
Wartime military expenditure abroad (ex- cluding military pay and allowances)	13	58	145	603	1,261	630	74		

TABLE 44. Government Transfer Payments Including Interest, 1926-1956

No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
							(milli	ons of d	ollars)					
	Federal:			1	1	1						1		
1	Family allowances	-	4000	-	-	-	_	_	-	_	-		-	-
3	War service gratuities	_	_	_	_	_	_	_	_	_		_	_	_
4	Rehabilitation benefits	_	_	-	-		-	-	_	_	-	-	_	an a
5 6	Pensions World Wars I and II 1	30	32	33	32	37	40	36	35	35 5	35	34	34	34
7	Unemployment insurance benefits			- 4	-4	5	- 5	5	-			_		_
8	Prairie farm assistance act	-	-	-	-	_	_	_	_	-	-	-	-	-
10	Pensions to government employees Federal grants to war charities	3	3	3	2	2	2	2	3	3	3	3	3	4
11	Interest on the public debt	130	129	125	122	121	121	135	140	139	134	137	137	129
12	Old age security fund payments	-	-	-		-	-	-	-	-	-		=	-
13	Miscellaneous 2	3	3	4	5	5	5	4	4	4	4	5	13	9
14	Total	169	170	169	165	170	173	1 82	186	186	181	185	192	1 82
	Provincial:													
15	Direct relief	_	-		1	3	21	38	57	82	79	71	70	58
16	Workmen's compensation benefits	9	10	10	13	14	13	11	10	11	12	13	16	15
17	Old age pensions	-4		2 4	3	11 5	15	15 5	16 5	19 5	22 6	29	37	39
19	Pensions to government employees	1	i	2	2	2	2	3	3	4	4	4	4	4
20	Grants to private non-commercial institutions	12	12	15	16	17	18	18	17	20	19	20	22	24
21	Interest on the public debt	42	43	43	47	51 1	57 1	64	69	72	75 2	71	69	71
23	Total	68	71	77	88	104	132	156	178	214	219	218	229	221
20	A V. C. C. C. C. C. C. C. C. C. C. C. C. C.	90	11.	- "	00	104	132	136	116	214	219	210	220	201
	Municipal:													
24	Direct relief	_	-	_	_	1	5	12	17	22	21	20	13	14
25 26	Pensions to government employees  Grants to private non-commercial institutions	1 8	7	1 8	1 8	1 8	1	1	1	1	1	1	1	1
27	Interest on the public debt	59	62	63	66	72	75	8 76	74	8 73	8 71	8 69	67	66
28	Total	68	70	72	75	82	89	97	100	104	101	98	89	80
29	GRAND TOTAL	3 05	311	318	328	356	394	435	464	504	501	501	519	492
		-												

<sup>1.</sup> Excludes pensions paid to non-residents, which are treated as government expenditure on goods and services. The amounts involved in the terminal years 1926 and 1956 were \$7 million and \$12 million, respectively.

TABLE 43. Government Expenditure on Goods and Services, 1926-1956

939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
				-			(n	nillions o	dollars)									140.
		!		1	1	1	1	i				I						
90	112	119	172	203	209	220	246	244	267	319	334	413	496	547	619	662	729	1
32	193	386	641	910	1,068	1,117	340	83	32	115	137	201	270	309	367	394	424	2
91	375	682	2,422	2,605	3, 193	1,760	491	302	324	436	506	1,088	1,723	1,703	1,463	1,442	1,518	3
213	680	1,187	3,235	3,718	4,470	3,097	1,077	629	673	870	977	1,702	2,489	2,559	2,449	2,498	2,671	4
														4,000	~, 110	2,100	~, ~	1
83	78	81	83	92	99	108	130	150	182	196	213	241	278	295	320	351	387	5
106	77	83	65	63	73	90	153	232	285	314	322	390	446	400	427	491	664	6
189	155	164	148	155	172	198	283	382	467	510	535	631	724	695	747	842	1,051	7
156	159	161	167	178	192	207	237	269	320	357	383	435	496	549	.606	666	738	8
125	122	123	124	126	144	154	199	261	337	390	449	503	570	629	659	774	806	9
281	281	284	291	304	336	361	436	530	657	747	832	93.8	1,066	1,178	1,265	1,440	1,544	10
							4											
683	1,116	1,635	3, 674	4,177	4,978	3,656	1,796	1,541	1,797	2,127	2,344	3,271	4,279	4,432	4, 461	4,780	5,266	11

<sup>2.</sup> Includes fixed capital formation by governments. The major portion of this fixed capital formation is in "other purchases of goods and services". A sall portion of the total fixed capital formation is also in the line called "wages, salaries, and supplementary labour income" for work done by the governments work force. Fixed capital formation for the years from 1949 on is shown below:

	1949	1950	1951	1952 (millions	1953 of dollars)	1954	1955	1956
Federal Provincial Municipal	157 178 172	169 197 222	285 230 265	431 291 318	398 266 314	290 300 352	297 351 386	340 462 460
Total		588	780	1,040	978	942	1,034	1,262

TABLE 44. Government Transfer Payments Including Interest, 1926-1956

939	1940	1941	1942	1943	1944	<b>1 94</b> 5	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
								(millions	of dollar	s)								
344 7 - 25 5 - 134 8 190			34 8 -15 6 5 178 -24 270	36 8 1 7 10 246 7 315	2 41 12 3 8 9 18 304 -11 408	114 116 13 10 49 20 16 6 10 15 379 - 13	240 322 87 91 60 25 49 17 11 3 444 19	261 277 799 700 224 311 122 15 	269 3 43 57 89 23 40 21 15 453 10 1,023	291 	307 	318	330 3 7 5 115 30 119 5 23 441 317 25 1,420	346 3 7 2 115 30 158 2 25 461 335 23 1,597	362 1 6 3 117 31 241 2 25 - 504 350 23 1,665	378 4 2 119 39 229 33 31 - 494 363 28	394 - 3 1 119 44 210 5 35 - 524 376 29 1,740	1 2 3 4 5 6 7 8 9 10 11 12 13 14
57 15 40 10 5 25 75 1	30 17 40 10 5 26 74 1	15 20 40 9 6 27 74 3	7 23 42 9 6 27 75 3	6 26 48 10 6 30 72 2	6 28 58 10 7 31 71 1 212	30 62 11 7 30 89 5	5 31 65 12 9 39 70 5	6 35 82 12 9 59 68 6	11 38 96 14 10 92 68 10	12 40 129 16 11 120 72 14	22 41 144 19 13 137 76 15	17 45 152 20 15 158 79 18	11 53 48 23 16 171 85 21	11 57 52 24 18 191 91 24	14 58 56 27 20 228 97 26 <b>526</b>	17 58 58 33 21 251 97 26 561	18 59 65 36 21 272 106 28 605	15 16 17 18 19 20 21 22 23
10 1 9 66 86	6 2 9 62 <b>79</b>	3 2 9 59 73	1 2 10 57 70	1 2 10 53 <b>66</b>	1 3 10 48 62	1 3 11 44 <b>59</b>	2 3 11 40 56	4 3 12 38 57	4 4 13 37 58	5 4 14 39 62	7 4 13 42 66	11 4 15 47 77	14 5 18 54 91	14 5 19 58 96	16 5 23 68 112	18 6 17 79 120	18 6 26 88 138	24 25 26 27 28
504	480	485	5 3 2	581	682	1,058	1,660	1,398	1,420	1,520	1,575	1,585	1,939	2,071	2,303	2,401	2,483	29

<sup>2.</sup> Prairie farm income plan included as follows: 1941, \$1 million; 1942, \$18 million.

TABLE 45. Subsidies, 1926-1956

						1								
No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
				L	L		/milli	ons of c	lollars)	1				
							(IMALI)	0110 01 0	0220000,					
	Federal: Agricultural:		1			1		Ì						
1.	Wheat acreage reduction	-	_	_		-				-	_	0.00	_	- may
2	Canadian wheat board trading loss		_	_		_			_	_	7	5	_	53
3	Fluid milk		_	_	_		_	_		reprint.		_		-
4	Butterfat 1		_	-	_	_	-	_	-	_		-		-
5	Milk-cheddar cheese	_		-		-	-	440	_	-			-	-
6	Feed freight assistance, western grain	-		_					_	_	_		-	-
7	Feed wheat drawback	-		_	_	****	-	SSTA	-	-	_			400
8	Hog premiums	-	-		-		-	_				- ma		-
9	Agricultural prices support board loss		_		tan-r			_	0010		7	-	-	
10	Miscellan eous <sup>2</sup>	-	0.00		-		11	2		-	7	_		-
11	Total	-	-	-	-		11	2	-	-	14	5	-	53
12	Commodity prices stabilization corporation <sup>3</sup>	_	_	-	_			-	-	-	ma	-	-	-
	Other subsidies:													
13	Emergency gold mines assistance	-		_	man		-			-	-		tere	_
14	Drawback to millers	-	-	_	-		Time .	_		ma	-	-	-	-
15	Emergency coal production board			time	*******	-	_	-	-	_	-			-
16	Maritime freight rates act	-	1	3	3	4	3	2	2	3	2	3	3	3
17	Movement of coal	_		_		1	1	1	3	2	2	2	2	2
18	Miscellaneous	2	2	2	2	1	3	3	3	3	4	3	4	3
19	Total other	2	3	5	5	6	7	6	8	8	8	8	9	8
20	Total federal subsidies	2	3	5	5	6	18	8	8	8	22	13	9	61
21	Total provincial subsidies	-	-	-	-	1	_	1		-	1	1	1	1
22	GRAND TOTAL SUBSIDIES	2	3	5	5	7	18	9	8	8	23	14	10	62

	1942	1943	1944	1945 (millions	1946 of dollars)	1947	1948	1949
Import subsidies:				,	·			
Petroleum products	12	13	12	9	5	2	_	****
Woven fabrics cotton	1	3	5	2	6	25	1	_
Raw cotton and linters	-	1	9	13	13	6	- 1	_
Coal and coke	-	2	7	6	11	8	_	_
Miscellaneous	6	16	20	3	10	5	2	_
Subtotal	19	35	53	33	45	46	2	
Domestic subsidies:								
Milk - production	4	2	_		mate	_	_	
Milk - consumption	-	19	19	21	11		-	_
Butterfat	7	6	- 1	_	-	-	_	
Miscellaneous	7	17	14	25	14	3	7	2
Subtotal	18	44	32	46	25	3	7	2
Trading loss (includes Canadian Wool Board)	_	9	16	15	17	11	6	- 1
TOTAL C.P.S.C.	37	88	101	94	87	60	15	1

TABLE 46. Transfers to Other Levels of Government<sup>1</sup>, 1926-1956

-									.0 1000					
No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
	Federal: To provinces:						(milli	ons of d	ollars)					
1 2 3 4 5 6	Old age and blind pensions <sup>2</sup> Subsidies to provinces <sup>3</sup> Unemployment and farm relief Taxation agreements <sup>4</sup> Health grants to provinces Miscellaneous Sub-total	13 - - 2 15	- 14 - - - 2 16	1 14 - - 2 17	2 14 - - 1 17	6 14 4 - 1 25	10 15 30 - - 1	12 15 34 — — 1 62	12 15 28 — — 1	15 15 39 — — 2	17 17 38 — — 2	21 17 50 — 3	29 21 53 - - 2	28 22 31 — 5
8	To municipalities: Payments to municipalities	_	-	_	-	-		_			mana .	_	-	-
10	Total  Provincial: To municipalities:	<b>15</b> 23	16 24	17 27	17 30	<b>25</b>	<b>56</b> 54	<b>62</b>	56	71	74	91	105	86
11	Municipal: To provinces:	6	4	5	7	10	10	10	20	26	22	27	28	30
12	GRAND TOTAL	44	44	49	54	71	120	110	86	107	106	128	140	123

Transferred from Commodity Prices Stabilization Corporation, May, 1943.
 Includes payment of \$ 14 million in 1947 for oats and barley; \$ 65 million in 1951 to farmers with respect to the United Kingdom wheat agreement, and # million in 1956 for carrying costs of temporary wheat reserves owned by the Canadian Wheat Board.
 Commodity Prices Stabilization Corporation:

Excludes relief loans and advances to the provinces.
 Includes \$4 million and \$7 million disabled persons allowances in 1955 and 1956 respectively.
 Excludes non-cash transactions under Natural Resources Settlement Agreements of \$5 million and \$16 million in 1930 and 1947 respectively.

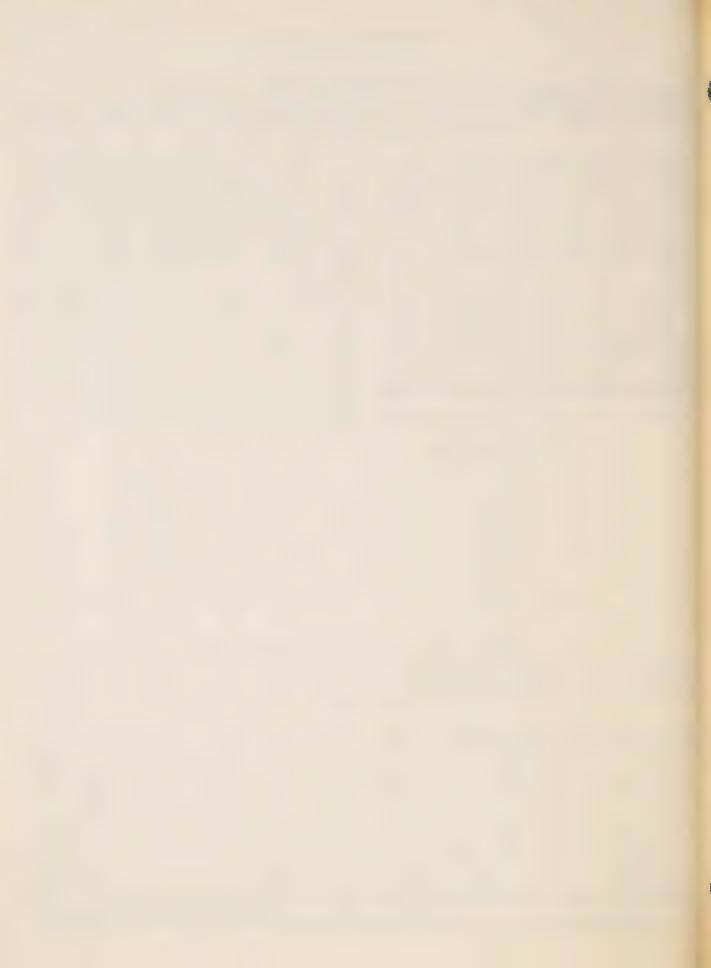
TABLE 45. Subsidies, 1926-1956

1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1956	1951	1952	1953	1954	1955	1956	No.
								(millio	ons of dol	lars)								
-29 	37 	23 24 - - 2 - 7 56	23 - 9 - 10 7 31 37	31 -5 16 11 16 2 - 7 78 88	10 14 13 23 4 16 8 14 — 10 112	1 31 13 24 4 17 7 11 - 8 116	10 14 22 5 19 7 6 7 90	6 - 4 1 20 6 5 - 20 62 62	-4  18 -5 1 3 31	14 -4 4 2 28 1	- 2 15 - 5 4 6 32	16 - 5 2 69 92	- - - 19 - 7 32 3 61	18 	19 5 3 6 33	16 6 6 2	17 	1 2 3 4 5 6 7 8 9 10
- - 2 4 3 9 -18 1 -17	- - 4 4 3 11 52 1 53	- 4 5 4 13 69 5	2 5 5 7 19 87 6 93	16 5 5 2 11 39 205 6	- 20 7 5 2 14 48 261 6	16 9 4 2 16 47 257 5	25 8 5 2 14 54 231 5	24 8 5 1 11 49 171 6	5  7 2 11 25 71 4 75	14 11 7 3 9 44 73 4	10 - 8 3 7 28 60 3 63	10 - 10 4 8 32 124 4	12 — 10 6 7 35 96 4	14 — 11 8 11 44 106 4	15 — 11 12 13 51 84 2	11 - 11 11 12 45 75 4	9 - 12 9 16 46 118 3	13 14 15 16 17 18 19 20 21

TABLE 46. Transfers to Other Levels of Government1, 1926-1956

					A / E DE L	1 100 2						,						
939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
								(millio	ns of dol	lars)								
29 21 24 - 5 79	30 19 18 - - 3 70	30 15 2 - 7 54	30 15 - 97 - 8 150	30 15 - 97 - 6 148	37 14 - 98 - 6 155	44 14  90  9 157	44 14 99 17 174	49 17 - 111 - 15 192	66 17 - 60 - 7	77 18 67 12 13	101 19 - 82 19 29 250	106 19 	244 27 29 365	23 20 - 308 27 31 409	23 20 - 330 31 24 428	25 20 329 34 35 443	31 20 359 34 28 472	1 2 3 4 5 6
_	_	_	-	_		mann	_	_	_	more	1	2	3	3	2	7	9	8
79	70	54	150	148	155	157	174	192	150	187	251	259	368	412	430	450	481	9
32	29	31	37	40	58	63	79	101	1 29	157	171	197	215	242	259	325	340	10
7	7	7	7	7	7	7	7	7	9	10	11	13	13	15	15	23	21	11
118	106	92	194	195	220	227	260	300	28.8	354	433	469	596	669	704	798	842	12

<sup>4.</sup> An adjustment has been made to exclude provincial corporation taxes collected by the federal government (net of remittances to the provinces) from the ures.



Section E
MISCELLANEOUS TABLES

TABLE 47. Personal Expenditure on Consumer Goods and Services, 1926-19561

	TABLE 47. Person	al Fxpe	enditur	e on C	onsume	er Good	ls and	Service	es, 192	6-1956	1			
No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	738
						1	(mill	lons of o	lollars)					
1	Food	903	1,024	1,137	1,234	1,178	970	783	778	798	819	882	981	959
2	Tobacco and alcoholic beverages	159	192	234	254	248	171	135	133	147	161	174	201	215
3	Tobacco products and smokers <sup>1</sup> accessories		97	102	107	112	97	91	89	88	91	96	110	
N	Alcoholic beverages	69	95	132	147	136	74	44	44	59	70	78	91	105
5	Clothing and personal furnishings	462	534	624	660	573	473	375	341	3 92	412	449	494	450
6	Men's and boys' clothing		128	152	161	140	115	93	89	104	112	121	132	120
7	Women's and children's clothing	159	188	223	236	205	167	124	108	131	134	149	168	148
8	Footwear		76	90	95	82	72	62	58	60	61	65	70	65
9	Laundry and dry cleaning	17	18	22	24	24	22	18	16	17	18	20	22	24
10	Other	113	124	137	144	122	97	78	70	80	87	94	102	93
11	Shelter <sup>2</sup>	538	360	5 92	625	63 9	609	536	487	476	494	517	549	569
12	Gross rents paid by tenants	182	189	204	219	233	234	218	199	194	201	213	229	243
14	er occupants	130	135	145	155	159	160	157	151	138	151	147	148	151
	dential capital consumption allowances	161	164	168	172	175	164	136	115	118	113	123	134	140
15	Other	65	72	75	79	72	51	25	22	26	29	34	38	35
16	Household operation	4 83	533	594	666	631	551	468	433	468	4 95	527	579	570
17	Fuel	132	135	138	138	138	127	116	115	117	121	128	134	132
18	Electricity	29	30	31	34	34	35	36	36	37	37	38	39	41
20	Telephone	17	18	20	22	22	20	20	19	19	19	19	19	18
21	Furniture	26 35	30	32 53	34 64	36	35	31	29	30	30	31	33	33
22	Home furnishings	39	48	59	71	57 63	47	34	30	37	41	4'7	57	51
23	Appliances, radios and television sets	55	69	83	100	89	69	48	40	39	45	51	59 <b>69</b>	54 66
24	Other	150	159	178	203	192	170	147	133	143	148	153	169	175
25	Transportation	324	348	403	420	363	296	248	232	278	2.95	322	375	363
26	Street-car, railway and other fares	138	143	149	151	137	109	92	83	85	86	95	101	97
27	New automobiles, used automobiles (net) and house trailers	94	97	126	118	76	57	35	37	57	73	84	99	90
28	Automotive operating expenses	92	108	128	151	150	130	121	112	136	136	143	175	176
29	Personal and medical care and death expenses	249	263	282	297	279	255	210	188	196	218	231	250	258
30	Medical and dental care	84	90	96	101	93	83	60	49	48	57	58	65	72
51	sickness insurance, prepaid medical care	57	59	61	63	62	60	53	52	E 19	0.4	80	E.O.	ar.
32	Other	108	114	125	133	124	112	97	87	57 91	64 97	72 101	72 113	75
33	Miscellaneous	424	439	448	R 65	456	448	439	392	427	444	447	455	512
34	Motion picture theatres <sup>3</sup>	40	40	40	41	38	34	29	25	25	27	29	32	513 33
35	Newspapers and magazines	29	29	31	31	32	32	32	31	32	35	37	39	42
36	Net expenditure abroad	- 38	- 47	- 61	- 72	- 72	- 82	- 65	- 46	- 58	- 56	- 70	- 80	- 58
	Other	393	417	438	465	458	464	443	382	428	438	451	464	496
		3,542	3,893	4,314	4,621	4,367	3,773	3,194	2,984	3,182	3,338	3,549	3, 884	3, 897
39	Durable goods	279	317	383	417	340	266	193	173	219	254	284	331	305
41	Major durable goods <sup>4</sup>	223	258	322	354	286	220	154	138	180	213	240	284	261
	N- 4 - 1	56	59	61	63	54	46	39	35	39	41	44	47	44
	50		2,091	2,367	2,557	2,410	2,046	1, 731	1,637	1,786	1, 841	1,960	2,165	2,136
43	Services <sup>6</sup>	1,423	1,485	1,564	1,647	1,617	1,461	1,270	1,174	1,177	1,243	1,305	1,388	1,456
	1. For complete list of contents of grouns see Pa													

For complete list of contents of groups, see Part. III, Section D.
 Excludes transient shelter.
 Excludes amusement taxes.

TABLE 47. Personal Expenditure on Consumer Goods and Services, 1926-19561

	,		Т	ABLE	47. Pc	ersonal	Expend	liture or	Consu	mer Goo	ds and	Service	s, 1926-	19561				
1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
								(millie	on of doll	ars)				L i		L		-
960	1,109	1,335	1,529	1, 655	1,782	1,920	2,126	2,442	2,823	2,887	3,140	3,619	3, 804	3,884	4,030	4,231	4,506	1
228	273	338	422	491	531	637	710	776	831	883	928	975	1,081	1,101	1,114	1,164	1,231	2
118	142	173	212	266	279	322	330	347	378	402	422	423	455	453	461	480	512	
110	131	165	210	225	252	315	380	4 29	453	481	506	552	626	648	653	684	719	4
479	5 93	725	828	872	941	1,040	1,169	1,295	1,440	1,497	1,528	1,660	1,803	1,844	1,826	1,900	2,021	5
125	144	171	189	195	212	235	278	318	345	348	359	396	424	424	411	430	466	6
161	210	260	299	323	354	392	457	510	597	631	635	691	764	783	779	808	855	7
65	74	94	107	112	122	137	157	177	191	199	195	209	221	226	226	231	245	8
25	29	36	41	42	44	47	55	64	78	88	95	107	122	132	135	142	152	9
103	136	164	192	200	209	229	222	226	229	231	244	257	272	279	275	289	303	10
5 82	612	664	719	762	801	832	884	963	1,066	1,200	1,385	1,586	1,778	1,972	2,192	2,392	2,572	11
252	266	281	291	295	300	303	308	322	341	369	413	454	511	570	639	698	743	12
152	156	174	184	198	210	221	243	275	330	377	433	515	582	640	689	756	816	113
														-				1
144	148	151	173	183	195	207	217	239	252	298	376	427	485	558	668	742	800	
34	42	58	71	86	96	101	116	127	143	156	163	190	200	204	196	196	213	15
593	663	731	739	729	744	817	1,016	1,215	1,337	1,416	1,544	1,669	1,875	1,999	2,104	2,308	2,480	16
142	149	171	187	213	203	215	225	252	277	272	297	314	313	304	334	369	408	1
45	50	53	55	55	58	60	68	74	80	90	109	128	145	168	191	212	225	
18	19	21	21	22	23	25	26	26	29	31	33	35	38	40	44	47		
35	37	41	45	50	52	56	62	64	70	84	102	120	140	157	172	188		
52	63	69	70	68	77	92	131	158	167	171	185	192	239	251	249	284	306	21
60	78	89	90	78	89	99	125	157	157	160	172	191	207	215	211	224	242	22
66	82	89	77	59	51	64	136	198	225	255	279	283	348	388	412	460	491	23
175	185	198	194	184	191	206	243	286	332	353	367	406	445	476	491	524	557	24
															4 000			0.5
370	416	460	328	326	341	369	577	824	898	1,109	1,355	1,381	1,599	1,775	1,800	2,107	2,201	1
101	108	131	171	211	224	240	263	277	293	303	290	294	322	318	313	342	369	26
86	107	102	29	16	14	12	73	194	207	375	619	627	783	904	859	1,051	1,076	27
183	201	227	128	99	103	117	241	353	398	431	446	460	494	553	628	714	756	28
															4	4 4	4 004	
261	289	315	333	355	379	420	479	545	615	891	745	839	936	1,012	1,091	1,157		
75	82	89	90	92	92	106	123	130	140	150	158	168	188	205	225	236	245	30
71	80	78	80	87	100	109	125	155	181	210	231	265	315	351	406	439	465	31
115	127	148	163	176	187	205	231	260	294	331	356	406	433	456	460	482	511	32
511	533	535	602	618	755	934	1,070	1,030	1,075	1,240	1,401	1, 731	1,905	2,005	2,018	2,205		
34	38	41	46	52	53	55	60	63	69	77 109	125	91	99	101	175	199	82 202	1
47	50	53	59	65	66	71 68	86 - 25	95	101	- 92	- 48	17	80	80	108	155	200	
- 64 494	- 35 480	- 49 490	- 23 520	- 98 599	630	740	749	936	1,041	1,146	1, 241	1,483	1,572	1,657	1,638	1,765	1,981	1
734	400	430	320	333	030	140	,10	000	.,	.,								
3, 984	4,488	5, 103	5,500	5, 808	6,274	6, 969	8,031	9,090	10,085	10, 923	12,026	13,460	14, 781	15,592	16, 175	17,464	18, 697	38
312	390	421	337	297	323	375	596	841	934	1, 146	1,451	1,490	1,780	2,001	1, 970	2,284	2,406	1
264	331	349	264	221	231	267	465	707	756	960	1,255	1,292	1,577	1,758	1,731	2,020	2, 114	1
48	59	72	73	76	92	108	131	134	178	186	196	198	203	243	239	264	29 2	41
2,186	2,474	2,908	3,240	3,541	3,772	4, 193	4,829	5,390	6,070	6,288	6, 711	7, 610	8, 051	8, 199	8,373	8, 879	9, 552	42
~, 100	~, T/T	A, 508	J, 240	0,011	0, 110	2,100	2,000	0,000	3, 3, 3	,,,,,,,								
1,486	1, 624	1,774	1, 923	1,970	2,179	2,401	2,606	2,859	3,081	3,489	3,864	4,360	4, 950	5,392	5;832	6, 301	6, 739	43
											- 6	6	itura and	l anniia	no endi-	c and tale	avision c	ote

Includes house trailers, new automobiles, net expenditure on used automobiles, home furnishings, furniture, and appliances, radios and television sets
 Includes jewellery, watches, clocks, silverware, toys, sporting and wheeled goods, and tools and garden equipment.
 Includes net expenditure abroad.

TABLE 48. Personal Expenditure on Consumer Goods and Services in Constant (1949) Dollars, 1926-1956

		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
No.							(m	illions o	f dollars	3)		1		
1	Food	1,344	1,547	1,710	1,817	1,785	1,869	1,808	1,809	1,701	1,713	1,789	1,879	1,830
2	Tobacco and alcoholic beverages	249	300	366	406	411	291	245	250	281	308	329	367	361
3	Clothing and personal furnishings	606	714	824	874	787	729	651	636	713	746	799	859	785
4	Shelter	623	655	678	701	700	684	651	658	681	700	716	733	736
5	Household operation	689	772	867	974	942	849	739	708	760	808	853	922	906
6	Transportation	465	530	605	610	526	444	357	336	404	431	474	551	516
7	Personal and medical care and death expenses	326	345	366	385	365	342	295	271	284	320	334	357	366
8	Miscellaneous	631	650	659	679	654	658	671	626	697	717	713	715	787
9	Adjusting entry	77	64	53	44	33	11	- 3	- 22	13	32	29	37	50
10	GRAND TOTAL	5, 01 0	5, 577	6, 128	6, 490	6,203	5, 877	5,414	5,272	5,534	5, 775	6, 036	6, 420	6, 337
11	Durable goods	470	560	674	713	593	501	373	347	426	485	535	610	539
12	Non-durable goods	2,588	3, 000	3,381	3,622	3, 513	3, 486	3, 335	3, 242	3, 370	3, 454	3, 603	3, 832	3, 741
13	Services 1	1,855	1, 939	2,018	2, 106	2, 042	1,854	1,680	1,656	1,721	1,809	1, 872	1,958	2, 017
14	Adjusting entry	97	78	55	49	55	36	26	27	17	27	26	20	40

<sup>1.</sup> Includes net expenditure abroad.

TABLE 49. Imputed Items Included in Gross National Expenditure, 1926-19561

No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
210							(m	illions o	f dollars	3)				
	Expenditure on consumer goods and services:				1				1				i	
	Food:													
1	Farm consumed farm produce	129	125	125	129	116	79	61	70	78	80	90	92	92
2	Other <sup>2</sup>	18	18	19	21	20	13	10	11	14	15	16	19	18
	Shelter:													
3	Imputed net residential rent and imputed residential capital consumption allowances	161	164	168	172	175	164	136	115	118	113	123	134	140
4	Imputed lodging, non-residential <sup>3</sup>	9	10	10	11	10	8	6	6	7	8	8	9	9
5	Other <sup>4</sup>	79	79	83	88	84	77	67	62	63	66	67	69	71
6	Total of imputed items in consumer expenditure	396	396	405	421	4.05	341	280	264	280	282	304	323	330
	Government expenditure on goods and services:													
7	Imputed gross rent on government-owned buildings	45	46	48	50	53	53	50	45	43	43	45	47	49
8	Total of imputed items	441	442	453	471	458	394	330	309	323	325	349	370	379

All these items are also included in the various components of Gross National Product.
 Includes food issued to members of the armed forces and to employees in lieu of wages.

TABLE 48. Personal Expenditure on Consumer Goods and Services in Constant (1949) Dollars, 1926-1956

			_						doods a	nd bett	ices in	Constan	(1343	Dollars	5, 1320-	1930		
1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
								(milli	ons of do	llars)								NO.
			1								1			ł	1			
1,901	2,081	2, 278	2,385	2, 511	2,692	2,870	3,016	3, 057	2, 893	2, 887	3,072	3, 089	3, 251	3,452	3, 598	3,788	3,981	1
379	429	496	570	589	619	729	765	811	837	883	907	879	960	1,029	1,049	1,094	1, 154	2
839	967	1,085	1, 227	1, 280	1,368	1,496	1,642	1,612	1, 503	1, 497	1,520	1,493	1,615	1,672	1,662	1,745	1,837	3
747	767	810	854	896	935	966	1,011	1,056	1, 116	1, 200	1,272	1,350	1,406	1,473	1,536	1,605	1,680	4
937	994	1, 035	1,017	990	1,014	1, 121	1, 321	1,407	1,394	1,416	1,501	1,473	1,604	1,699	1,795	1,996	2, 140	5
523	569	589	422	424	442	479	711	927	933	1,109	1,303	1, 207	1,369	1,519	1,541	1,887	1,910	6
368	407	441	455	478	506	548	612	647	652	691	734	750	775	818	842	875	896	7
775	803	750	814	789	944	1,140	1, 281	1,140	1, 123	1,240	1, 333	1,576	1,653	1,676	1,627	1.748	1,918	8
41	17	- 13	- 52	- 55	- 76	- 82	- 36											9
6,510	7, 034	7, 471	7,692	7, 902	8,444	9, 267	10,323	10,657	10,451	10, 923	11,642	11,817	12,633	13,338	13,650	14,738	15,516	10
561	663	648	504	438	472	541	803	983	954	1, 146	1,432	1, 297	1,526	1,737	1,724	2, 104	2, 185	11
3,890	4, 158	4, 502	4,723	5,001	5, 283	5,807	6,439	6, 496	6, 253	6, 288	6, 574	6,667	7,016	7,348	7,535	8,025	8, 544	12
2, 030	2, 186	2, 304	2,422	2, 429	2,651	2,882	3,077	3, 178	3, 244	3,489	3,636	3,853	4,091	4, 253	4,391	4,609	4, 787	13
29	27	17	43	34	38	37	4											14

TABLE 49. Imputed Items Included in Gross National Expenditure, 1926-19561

				A 7 × A 7 A	20, 1	mpacc	. ACCING		- 111 - 011 -		J. 10 10 10 10 10 10 10 10 10 10 10 10 10		-,					
1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
								(millio	ns of dol	lars)								
93	101	109	133	147	147	157	165	175	203	182	173	195	210	188	182	183	183	1
20	45	76	113	148	161	146	62	52	63	64	69	95	96	92	91	92	100	2
144	148	151	173 15	183	195	207	217 20	239	252 23	298	376 23	427	<b>485</b> 29	558 29	668 29	742 29	800	3 4
												_						
75	91	105	120	122	116	122	95	95	103	114	114	135	142	156	160	159	168	5
341	395	454	554	816	636		559	581	644	681	755	879	962	1,023	1,130	1,205	1,283	6
50	52	55	58	59	59	61	62	66	90	97	106	120	133	143	153	168	181	
3 91	447	509	612	675	695	711	621	647	734	778	861	999	1,095	1,166	1,283	1,373	1,464	8

Lodging in bunk houses, ships, hotels, etc., furnished to employees in lieu of wages.
 Includes clothing issued to the armed forces, wood fuel cut and used on farms, and estimated services rendered by banks without specific charge.

TABLE 50. Analysis of Corporation Profits, 1926-1956

		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
No.	are not seek told to be believed to the seek told to be a seek told to the seek told to the seek told to the seek told to the seek told to the seek told to the seek told told to the seek told told told told told told told told						(millio	ns of do	llars)					
1	Corporation profits before taxes <sup>1</sup>	325	368	433	396	144	13	- 98	73	191	237	314	432	334
2	Add: dividends paid to non-residents	95	106	115	158	177	150	130	98	104	120	161	166	175
3	Corporation profits including dividends paid to non-residents	420	474	548	554	321	163	32	171	295	357	475	598	509
4	Deduct: corporation income tax liabilities <sup>2</sup>	- 34	- 38	- 45	- 48	- 40	- 33	- 32	- 37	- 52	- 65	- 83	- 101	- 94
5	Excess of tax liabilities over collections	2	1	7	2	- 8	- 6	- 9	5	10	12	13	17	- 9
6	Tax collections	32	37	38	46	48	39	41	32	42	53	70	84	103
7	Corporation profits after taxes	386	436	503	506	281	130	_	134	243	292	392	497	415
8	Deduct: dividends paid to non-residents	- 95	- 106	- 115	- 158	- 177	- 150	- 130	- 98	- 104	- 120	- 161	- 166	- 175
9	Corporation profits retained in Canada	291	330	388	348	104	- 20	- 130	36	139	172	231	331	240
10	Deduct: dividends paid to Canadian persons	- 93	- 95	- 106	- 112	- 99	- 97	- 26	- 69	- 85	- 84	- 82	- 103	- 121
11	charitable contributions from corporations	- 4	- 4	- 5	- 5	- 3	- 2	- 2	- 2	- 2	- 3	- 4	- 5	- 4
12	Undistributed corporation profits	194	231	277	231	2	-119	- 158	- 35	52	85	145	223	115

<sup>1.</sup> Line 1 is identical with the total shown in Table 1 and represents corporation profits before taxes on a national concept basis. As dividends paid to non-residents—which must be excluded on a national concept basis—are really a distribution of profits, it is necessary to add them back to arrive at a figure of total profits as such—line 3. Lines 4 to 12 provide an analytical breakdown of line 3. For an industrial distribution of total profits (line 3) see Table 27.

TABLE 51. Capital Consumption Allowances and Miscellaneous Valuation Adjustments by "Form of Organization", 1926-1956

No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
				1			(millio	ns of do	llars)					
1	Corporations	235	259	292	317	312	278	248	226	224	225	237	259	261
2	Individuals and unincorporated businesses	278	295	315	336	332	306	275	252	245	251	256	270	278
3	Government business enterprises	54	57	64	64	67	62	53	50	53	55	62	65	65
4	Capital consumption allowances and miscellaneous valuation adjustments <sup>1</sup>	567	611	671	717	711	646	576	528	522	531	555	594	604

<sup>1.</sup> Including net bad debt allowances (charges less recoveries) as follows:

(onar Bon Icon I	CCCVCI	ico, ao	toliows.										
	1926	1927	1928	1929	1930	1931 (million	1932 ns of do	1933 llars)	1934	1935	1936	1937	1938
	36	35	39	40	39	44	47	45	38	35	35	33	31

TABLE 50. Analysis of Corporation Profits, 1926-1956

_								Jo. Alle	-0	Colpor									
	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
									(millio	ns of dol	lars)								
	521	667	951	1, 135	1, 125	1,081	1, 106	1, 269	1, 566	1, 715	1, 562	2, 118	2, 455	2, 364	2,294	1,963	2, 489	2, 802	1
	177	182	168	170	156	153	138	205	248	249	317	404	370	334	317	327	395	444	2
	898	849	1,119	1, 305	1, 281	1, 234	1, 244	1, 474	1, 814	1,964	1,879	2, 522	2, 825	2, 698	2, 611	2, 290	2,884	3, 246	3
	- 115	- 327	- 510	- 629	- 640	- 598	- 599	- 654	- 702	- 687	- 718	- 983	-1,416	-1,384	-1,220	-1.082	-1,280	-1,430	4
	22	186	183	- 52	- 95	- 107	19	50	34	36	20	142	148	12	- 149	- 94	170	58	5
	93	141	327	681	735	705	580	604	668	<b>6</b> 51	698	841	1, 268	1, 372	1, 369	1, 176	1, 110	1, 372	6
	583	522	609	676	641	636	645	E20	1, 112	1,277	1, 161	1,539	1, 409	1,314	1, 391	1,208	1, 604	1, 816	7
	- 177	- 182	- 168	- 170	-156	- 153	- 138	- 205	- 248	- 249	- 317	- 404	- 370	- 334	- 317	- 327	- 395	- 444	8
	406	340	441	506	485	483	507	615	864	1,028	844	1, 135	1,039	980	1,074	881	1,209	1,372	9
Print Commence of the Park	- 125	- 160	- 150	- 129	- 142	- 123	-119	- 115	- 219	- 216	- 234	- 358	- 350	- 335	-317	- 284	- 302	- 330	10
1	- 6	- 7	- 10	- 12	- 12	- 11	- 12	- 12	- 17	- 22	- 23	- 25	- 27	- 27	- 28	- 26	- 28	- 30	11
	275	173	281	365	331	349	376	488	R2 8	790	587	752	562	618	729	571	879	1, 012	12

2. Includes elective tax on undistributed income of \$54 million in 1950, \$48 million in 1951, \$10 million in 1952, \$10 million in 1953, \$7 million in 1954 and \$8 million in 1955.
For excess profits taxes, see footnote 1, Table 39.

TABLE 51. Capital Consumption Allowances and Miscellaneous Valuation Adjustments by "Form of Organization", 1926-1956

TAB	LE 31	Capit	al Com	Sumper	JII /MAIO	W MILOU	J 4411 4 1111											
1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
								(millio	ns of dol	lars)								
283	388	493	579	536	472	447	421	582	702	797	907	1,037	1, 189	1,354	1, 521	1, 688	1, 923	1
287	297	320	348	369	393	404	477	544	625	742	857	993	1,045	1, 111	1,170	1, 233	1,307	2
67	65	BØ	116	132	140	117	100	97	114	134	149	173	188	208	214	242	262	3
637	750	893	1,043	1,037	1, 005	968	998	1,223	1, 441	1, 673	1,913	2, 203	2,422	2, 673	2,905	3, 163	3, 492	4
1939	1940	1941	1942	1943	1944	1945	1946	1947	1948 ns of dol:	1949 lars)	1950	1951	1952	1953	1954	1955	1956	
33	35	30	29	21	19	22	16	37	38	41	42	46	48	54	57	60	64	5



# Section F RECONCILIATION STATEMENTS

TABLE 52. Accrued Net Income of Farm Operators from Farm Production, 1926-1956 Reconciliation Statement

	All the second s	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
No.							(milli	ons of do	ollars)					
1	Net income of farm operators from farming opera-	618	632	642	417	361	136	130	109	203	238	245	307	364
2	Deduct: Amounts included in investment income <sup>2</sup>	- 23	- 25	- 25	- 26	- 22	- 19	- 15	- 14	- 15	- 16	- 19	- 20	- 16
3	Deduct: Transfer payments under prairie farm income plan and prairie farm assistance act 3	-	-	-	-	-		_	_	-	-	-		
4	Other adjustments 4	2	_	3		-	-	_	-	-	-	-	-	-
5	Equals: Net income received by farm operators from farm production	597	607	620	391	339	117	115	95	188	222	226	287	348
6	Adjustment on grain transactions 5	12	- 7	16	1	4	- 23	- 11	- 29	- 21	- 4	- 27	- 7	5
7	Accrued net income of farm operators from farm production 6	609	600	636	392	343	94	104	66	167	218	199	280	353

- 1. These figures are as published by the Agriculture Division, Dominion Bureau of Statistics, except the years 1951 to 1956, which are preliminary.

  2. This item includes corporation profits in agriculture and imputed net rent of owner-occupied houses.

  3. These items are deducted since transfer payments are excluded from Net National Income at factor cost.

  4. These adjustments consist of an estimate of net income of farm operators from farming operations in Newfoundland and an adjustment for the difference in the valuation of the physical change in inventories. The Agriculture Division values the change in the quantity of farm held grain at average annual prices, whereas the National Accounts estimates value this quantity change each quarter in terms of average quarterly prices. Some minor statistical revisions, received too late for incorporation in the main tables, are also included here.

TABLE 53. Federal Government Surplus-or Deficit, 1926-1956

Reconciliation of Federal Government Transactions Related to the National Accounts with Rowell-Sirois and Public Accounts Data, 1926-1956

No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
							(millio	ons of do	ollars)					
1	Surplus or deficit as per Rowell-Strois and Public Accounts. 1926-27 to 1955-56 1	60	67	96	51	- 95	- 162	- 152	- 130	- 115	- 158	- 78	- 16	- 17
2	Difference between fiscal and calendar year <sup>2</sup>	_	_	***	-	-	-		_			-	-	- 13
3	Extra-budgetary receipts, pension and social insurance funds 3	8	9	9	10	11	11	12	11	10	11	12	12	13
4	Excess of corporation tax accruals over collections	2	1	7	2	- 8	- 6	- 9	5	10	12	13	17	- 9
5	Revenue items omitted	- 2	- 6	- 4	- 5	- 7	- 7	- 4	_	- 3		- 10	- 1	- 4
6	Extra-budgetary expenditures, pension and social insurance funds	- 3	- 3	- 3	- 2	- 2	- 2	- 2	- 3	- 3	- 8	- 3	- 3	- 4
7	Reserves, write-offs and similar items charged to expenditure	-		_	-	5		_		_	-	- 1	_	5
8	Shipment of previously produced military equipment to NATO (less expenditures of defence equipment replacement account)	_			- Table	_		_		-	-	_	_	_
9	Other adjustments	1	- 2	- 2	- 3	~ 3	3	- 2	_	6	15	26	- 3	- 61
10	Surplus or deficit as per National Accounts	66	66	103	53	- 99	- 163	- 157	-117	- 95	- 123	- 40	6	- 90

<sup>1.</sup> Source: 1926-1937: Report of the Royal Commission on Pominion-Provincial Relations, Appendix A. 1938-1956: Public Accounts of the Federal

<sup>2.</sup> For the years 1938-56, the adjustment to calendar years is made on the basis of figures published monthly by the Comptroller of the Treasury. No adjustment to a calendar year basis has been made for the years 1926-1937, the figures are by fiscal years ending nearest December 31 of the calendar year. It should be noted that the Public Accounts fiscal year figures include only three months of the calendar year in which the fiscal year ends. For example fiscal year 1955-56 includes only January to March 1956, the balance of the fiscal year being in the calendar year 1955. An adjustment is therefore necessary to the fiscal year calendar year 1956 not covered by the

TABLE 52. Accrued Net Income of Farm Operators from Farm Production, 1926-1956

Reconciliation Statement

1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
					I		(11	illions	of dollar	rs)								-
431	470	489	1,030	792	1,143	868	1,078	1,132	1,554	1,417	1,222	1,935	1,917	1,639	1, 029	1,286	1,475	1
- 17	- 16	- 18	- 20	- 22	- 25	- 26	- 27	- 31	- 34	- 33	- 36	- 40	- 39	- 42	- 43	- 45	- 46	2
- 2	- 10 6	- 7	- 33		- 8	- 6	- 17	- 12 - 3						- 2		- 33		3
412	450	463	976	770	1,110	836	1,034	1,086	1,478	1,359	1,156	1,945		1,599			1,448	
- 50	33		- 47	- 50	- 22	70	22	34	- 100	- 111	166	- 12	43	- 24	8	64	20	6
362	483	463	929	720	1,088	906	1,056	1,120	1,378	1,248	1,322	1,933	1,959	1,575	1,017	1,261	1,468	7

<sup>5.</sup> Since the National Income measures earnings arising out of current production rather than receipts of income, it is appropriate to include in Table 1 inme accruing to farm operators from farm production rather than income received. Accordingly, an adjustment has been made to take account of the accrued earngs of farm operators arising out of the operations of the Canadian Wheat Board and the Canadian Co-operative Wheat Producers.
6. See also Table 1, line 5.

#### TABLE 53. Federal Government Surplus or Deficit, 1926-1956

Reconciliation of Federal Government Transactions Related to the National Accounts with Rowell-Sirois and Public Accounts Data, 1926-1956

																		-
1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
							1)	nillions	of dolla	rs)								
- 51	- 119	-378	- 396	-2, 137	-2,557	- 2, 559	- 2, 123	374	677	595	131	211	248	24	46	-152	- 33	1
-44	- 207	66	-1, 274	- 420	142	520	1,455	377	- 37	-311	122	300	-367	- 24	- 195	11	30 5	2
						1												
15	14	40	74	82	94	96	99	123	155	172	191	262	495	625	654	686	777	3
22	186	183	- 52	- 95	- 107	19	50	34	36	20	142	148	12	- 149	- 94	170	58	4
- 3	- 31	- 21	- 19	- 28	- 111	- 44	- 98	- 91	- 69	- 62	- 73	- 67	- 49	- 92	- 79	- 21	- 37	5
- 7	- 15	- 12	- 21	- 8	- 20	- 32	- 77	- 58	- 76	- 101	-131	- 108	-464	- 520	- 618	-656	- 626	6
3	29	44	45	69	71	72	- 522	62	92	154	130	167	195	139	145	110	137	7
-		-		_	_		-	_	_	_	57	70	95	55	5	- 2	- 22	8
60	3	48	- 83	592	- 224	94	- 76	- 137	- 18	13	66	38	88	84	36	42	36	9
- 5	- 140	- 30	-1,726	-1,945	-2,712	-1,834	- 248	684	760	480	635	1,021	253	142	- 100	188	595	10

<sup>3.</sup> Includes the two per cent portion of the personal income tax, the corporation income tax and the sales tax allocated to the old age security fund.

TABLE 54. Business Gross Fixed Capital Formation, 1926-1956

Reconciliation Statement

									T		1			
No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
							(millio	ns of do	llars)					
1	Total private and public investment in Canada 1	808	965	1, 163	1,344	1, 154	804	444	319	404	491	574	809	754
2	Deduct: new residential construction by governments 2,13	_	_		-	_		-	_	_	_	_	-	
3	new non-residential construction by gov- ernments <sup>3</sup>	- 92	- 117	- 136	- 160	- 200	- 160	- 109	- 74	- 92	- 105	- 98	- 153	- 137
4	new machinery and equipment outlays by governments 3	- 14	- 18	- 20	- 23	- 28	- 22	- 16	- 11	- 14	- 17	- 18	- 23	- 25
5	Other adjustments <sup>4</sup>													
6	Business gross fixed capital formation	702	830	1,007	1,161	926	622	319	234	298	369	458	633	592

<sup>1.</sup> As presented in the publication Private and Public Investment in Canada, Outlook, 1957 and similar reports for prior years. (Department of Trade and Commerce). In the years 1926 to 1950, estimates differ somewhat from those shown in Private and Public Investment in Canada, 1926-1951, as a result of revisions in manufacturing, housing, agriculture and fishing.

2. Excluding residential construction under Veterans' Land Act, construction of veterans rental housing by Central Mortgage and Housing Corporation, and joint federal -provincial housing (Section 36, National Housing Act) which are included under line 6.

TABLE 55. Exports and Imports of Goods and Services, 1926-19561 Reconciliation Statement

-														
No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
							(millio	ns of do	ollars)		*			
	Exports of goods and services:		1		1	1	1				1	I	1	
1	Merchandise exports	1,272	1,215	1,341	1,178	880	601	495	532	648	732	954	1,041	844
2	Gold production available for export	30	32	40	37	39	57	70	82	114	119	132	145	161
3	Interest and dividends received from non-residents	32	41	46	61	59	48	37	38	57	64	75	76	66
4	Other receipts from services rendered to non-residents	331	345	361	370	319	266	206	177	201	230	269	331	290
5	Subtotal: "Currentreceipts" as per Canadian Balance of International Payments	1,665	1,633	1,788	1,646	1,297	972	808	829	1,020	1,145	1,430	1,593	1,361
6	Adjustments <sup>2</sup> —official contributions and mutual aid to NATO countries	_	400	_	and the same	_	_	_	_	_	_	_	_	_
7	Other	- 15	- 15	- 15	- 14	- 11	- 5	- 4	- 3	- 2	- 2	- 2	- 2	- 5
8	Total "exports of goods and services" as per National Accounts 3	1,650	1,618	1,773	1,632	1,286	967	804	826	1,018	1,143	1,428	1,591	1, 356
	Imports of goods and services:													
9	Merchandise imports	973	1,057	1,209	1,272	973	580	398	368	484	526	612	776	649
10	Interest and dividends paid to non-residents	240	257	275	322	348	330	302	264	268	270	311	302	307
11	Other payments for services rendered by non-residents	325	329	336	363	313	236	204	199	200	224	263	335	305
12	Subtotal: "Current payments" as per Canadian Balance of International Payments	1, 538	1,643	1,820	1,957	1,634	1,146	904	831	952	1,020	1,186	1,413	1, 261
13	Adjustments <sup>2</sup> -mutual aid to NATO countries	_	_	_	100m	_	_	_						
14	Other	- 16	- 14	- 12	- 12	- 9	- 4	- 3	- 3	- 4	- 3	- 3	- 4	- 4
15	Total "imports of goods and services" as per National Accounts	1, 522	1,629	1, 808	1, 945	1, 625	1,142	901	828	948	1, 017	1, 183	1, 409	1, 257

Data sources are reports on the Canadian Balance of International Payments (Balance of Payments Section, Dominion Bureau of Statistics). Figures 1. Data sources are reports on the Canadian Balance of International Payments (Balance of Payments Section, Dominion Bureau of Statistics). Figures include mutual aid to NATO countries.

2. These adjustments are necessary to ensure consistency within the overall framework of the accounts. Included are the following items:—
and services in the National Accounts.

(ii) Deduction of "inheritances and migrants' funds, which are treated as capital transactions in the National Accounts.

(iii) Adjustments to exclude Newfoundland from the balance of payments in the years 1940-1948.

3. See also Table 2.

TABLE 54. Business Gross Fixed Capital Formation, 1926-1956

Reconciliation Statement

										_								
1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
								(millio	ns of dol	lars)								
746	1,028	1,465	1,556	1,521	1,343	1,320	1, 674	2,440	3,087	3,539	3,936	4, 739	5,491	5,976	5,721	6,244	7, 891	1
-	-	- 11	- 30	- 30	- 12	- 12	- 39	- 32	- 26	- 28	- 40	- 52	- 38	- 23	- 11	- 19	- 21	2
- 129	- 169	- 271	- 323	- 320	- 185	- 162	- 202	- 274	- 373	- 424	- 488	- 654	- 897	- 848	- 828	- 924	-1,136	3
- 25	- 56	- 98	- 117 - 22	- 197 - 87	- 221 - 25	- 115	- 45	- 49	- 69	- 55	- 60	- 74	- 105	- 107	- 103	- 91	- 105	4 5
5 92	803	1,085	1,064	887	900	1,031	1,388	2,085	2, 619	3,032	3,348	3,959	4,451	4, 998	4,779	5,210	6, 629	6

Included in "government fixed capital formation", line 4, Table 2.
 United States government expenditure on the wartime "Canol" project.

TABLE 55. Exports and Imports of Goods and Services, 1926-19561

Reconciliation Statement

L								10	econcin	amon or	at an ent								
	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
									(millio	ns of doll	ars)								
								1		İ									
	906	1,202	1,732	2,515	3,050	3,590	3, 474	2,393	2,723	3,030	2,989	3,139	3,950	4,339	4,152	3,929	4,332	4,833	1
	184	203	204	184	142	110	96	96	99	119	139	163	150	150	144	155	155	150	2
	57	52	60	67	59	71	80	70	64	70	83	91	115	145	165	147	160	140	3
	310	319	462	610	813	786	806	806	862	928	878	904	1,096	1,224	1,276	1,289	1,425	1,471	4
ŀ	1,457	1,776	2, 458	3,376	4,064	4,557	4, 456	3,365	3,748	4,147	4,089	4, 297	5,311	5,858	5,737	5, 520	6,072	6,594	5
	_	_	_	-1,002	- 518	- 960	- 858	- 97	- 38	- 23	-	- 57	- 145	- 200	- 246	- 284	- 222	- 157	6
١.	6	32	9	- 13	- 102	- 36	- 1	- 58	- 70	- 74	- 68	- 57	- 77	- 85	- 91	- 89	- 86	- 98	7
V.	1,451	1, 908	2,467	2,361	3,444	3,561	3, 597	3,210	3,640	4,050	4,021	4, 183	5, 089	5,573	5,400	5, 147	5,764	6,339	8
	713	1,006	1,264	1,406	1,579	1,398	1,442	1,822	2, 535	2,598	2,696	3, 129	4,097	3,850	4,210	3,916	4,543	5,567	9
	306	313	286	270	261	264	251	312	337	325	390	475	450	413	404	423	483	530	10
	312	308	417	599	1,018	1,877	1,217	868	827	773	826	1,027	1, 281	1,431	1,566	1,613	1,744	1,869	11
	312	300	411	299	1,010	1,011	1,211	000	021				.,						
	1,331	1,627	1,967	2,275	2,858	3,539	2,910	3,002	3,899	3,696	3,912	4,631	5,828	5,694	6,180	5,952	6,770	7,966	12
	_	_	_	_	_	_	_	_	_	_	-	- 57	- 145	- 200	- 246	- 284	- 222	- 157	13
	3	2	9	32	59	30	_	- 125	- 78	- 63	- 59	- 61	- 70	- 94	- 91	- 94	- 105	- 112	14
ı	1,328	1,629	1, 976	2,307	2,917	3, 569	2,910	2,877	3, 621	3,633	3,853	4, 513	5,613	5,400	5, 843	5,574	6,443	7,697	15

#### APPENDIX

## TABLE 1. Population of Canada, by Provinces, 1926-1956

Estimated as of June 1 for Intercensal Years

No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
			•				(in	thousar	ids)					
1	Newfoundland									1				
2	Prince Edward Island	87	87	88	88	88	88	89	90	91	92	93	93	94
3	Nova Scotia	515	515	515	515	514	513	519	525	531	536	543	549	555
4	New Brunswick	396	398	401	404	406	408	414	419	423	428	433	437	442
5	Quebec	2, 603	2, 657	2, 715	2,772	2. 825	2.874	2, 925	2, 972	3,016	3,057	3,099	3, 141	3, 183
6	Ontario	3, 164	3, 219	3, 278	3, 334	3,386	3, 432	3, 473	3, 512	3, 544	3, 575	3, 606	3, 637	3, 672
7	Manitoba	639	651	664	677	689	700	705	708	709	710	711	715	720
8	Saskatchewan	821	841	862	883	903	922	924	926	928	930	931	922	914
9	Alberta	608	633	658	684	708	732	740	750	758	765	773	776	781
10	British Columbia <sup>1</sup>	606	623	641	659	676	694	707	717	727	736	745	759	775
11	Yukon <sup>1</sup>	4	4	4	4	4	4	4	4	4	5	5	5	5
12	Northwest Territories 1	8	9	9	9	9	9	10	10	10	11	11	11	11
13	Canada	9, 451	9, 637	9, 835	10,029	10,208	10,376	10,510	10,633	10,741	10,845	10,950	11,045	11,152

<sup>1.</sup> In Tables 28 to 35 (Geographical Distribution of Personal Income), figures for the Yukon and Northwest Territories are included with British Columbia until the year 1950. Per person estimates of personal income for British Columbia, therefore, require that a similar adjustment be made to the population data.

# TABLE II. The Civilian Labour Force, 1926-19561

No.		1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
						-	(in	thousan	nds)					
1	Civilian non-institutional population, 14 years of age and over	6, 326	6, 486	6, 655	6, 820	6, 972	7, 116	7, 240	7, 366	7, 491	7, 621	7, 748	7,870	7, 997
	Civilian labour force:													
	Persons with jobs:													
2	Non-agricultural	2, 299	2,406	2, 491	2, 541	2, 451	2, 454	2, 233	2, 192	2, 430	2, 479	2, 576	2, 776	2, 707
3	Agricultural	1, 251	1, 284	1, 305	1, 307	1, 238	1, 216	1, 237	1, 257	1,277	1, 298	1,319	1,339	1,359
4	Total persons with jobs	3, 550	3, 690	3, 796	3, 848	3, 689	3, 670	3, 470	3, 449	3, 707	3, 777	3, 895	4, 115	4,066
5	Persons without jobs and seeking work	108	67	65	116	371	481	741	826	631	625	571	411	522
6	Total civilian labour force	3, 658	3, 757	3, 861	3, 964	4,060	4, 151	4, 211	4, 275	4, 338	4, 402	4, 466	4, 526	4, 588

<sup>1.</sup> Figures from 1952 to 1956 are subject to revision.

Sources: D.B.S. Reference Papers No. 23 (revised edition) and No. 58. In 1949, an estimate for Newfoundland has been included. Since 1945, the above data are annual averages of quarterly or monthly labour force sample surveys. For earlier years, the data are based on census and other related material estimated as of June 1. For a detailed description of the series, the reader is referred to the above sources.

# APPENDIX

# TABLE I. Population of Canada, by Provinces, 1926-1956

Estimated as of June 1 for Intercensal Years

1!	939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
		,							(in	thousand	s)	1	L	l			1		110.
																1			
											345	351	361	374	383	395	406	415	1
	94	95	95	90	91	91	92	94	94	93	94	96	98	100	101	101	100	99	2
	561	569	578	591	606	611	619	608	615	625	629	638	643	653	663	673	683	695	3
	447	452	457	464	463	461	467	478	488	498	508	512	516	526	533	540	547	555	4
3,	230	3, 278	3, 332	3, 390	3, 457	3,500	3, 560	3,629	3, 710	3, 788	3,882	3,969	4,056	4, 174	4. 269	4, 388	4, 517	4,628	5
3,	708	3, 747	3, 788	3, 884	3,915	3,963	4,000	4,093	4,176	4,275	4,378	4, 471	4, 598	4,788	4,941	5, 115	5, 266	5, 405	6
	726	728	730	724	723	727	727	727	739	746	757	768	776	798	809	823	839	850	7
	906	900	896	848	838	836	833	833	836	838	832	833	832	843	861	873	878	881	8
	786	790	796	776	785	808	808	803	825	854	885	913	939	973	1,012	1,057	1,091	1, 123	9
	792	805	818	870	900	932	949	1,003	1,044	1,082	1,113	1,137	1,165	1,205	1,248	1, 295	1,342	1,399	10
	5	5	5	5	5	5	5	8	8	8	8	8	9	9	9	10	11	12	11
	12	12	12	12	12	12	12	16	16	16	16	16	16	16	16	17	18	19	12
.1,	267	11,381	11,507	11,654	11,795	11,946	12,072	12, 292	12,551	12, 823	13, 447	13, 712	14,009	14, 459	14, 845	15,287	15, 698	16, 081	13

TABLE II. The Civilian Labour Force, 1926-19561

-							1110-			1611 1060	041 1 01	00, 200	2000						
1	.939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	No.
1						1			(in	thousand	s)								
				I	ı	ı			1									1	
8	, 122	8, 140	8,056	8, 085	7, 871	7, 920	8,048	8, 779	9,007	9, 141	9, 490	9,615	9, 726	9,945	10, 144	10, 300	10,529	10,710	1
2	, 741	2,840	3,047	3, 295	3, 375	3, 349	3, 303	3, 500	3,722	3, 790	3, 931	3, 979	4, 171	4, 295	4, 388	4, 321	4, 510	4, 753	2
1	, 379	1, 344	1, 224	1, 139	1,118	1, 136	1, 144	1,186	1,122	1,096	1,083	1,018	940	891	858	873	818	773	3
4	, 120	4, 184	4, 271	4, 434	4, 491	4, 485	4, 447	4, 686	4, 844	4, 886	5,014	4, 997	5, 111	5, 186	5, 246	5, 194	5, 328	5, 526	4
	529	423	195	135	76	63	73	143	98	102	144	166	106	129	137	232	230	179	5
4	, 649	4, 607	4, 466	4, 569	4, 567	4, 548	4, 520	4, 829	4, 942	4, 988	5, 158	5, 163	5, 217	5, 315	5, 383	5, 426	5, 558	5, 705	6



## PART II

# THE CONCEPTUAL FRAMEWORK OF THE NATIONAL ACCOUNTS

#### INTRODUCTION

- 1. National accounting provides a systematic description of the operation of the economy of a nation by bringing together in a comprehensive and interrelated system a vast array of economic statistics. National accounts and the accounts of a business enterprise are similar in that they both attempt to describe the operation of an economic unit during a period of time by means of balancing sets of accounts. The core or nucleus of Canada's system of national accounts is the present volume, National Accounts, Income and Expenditure, 1926-1956. The following discussion of concepts is devoted mainly to explaining this set of accounts.
- 2. The description begins in Section A with a short survey of the development of the income and expenditure accounts and the uses of these accounts. In Section B attention is focussed on the fundamental concept of production and the approach used in Canada to measure the nation's output of goods and services during a period of time - the Gross National Product. In Section C, an attempt is made to relate more recent developments in national accounting to the existing set of income and expenditure accounts1. In the first part of Section C, a more complete system of national accounts is outlined within a single comprehensive framework. This outline relates the inter-industry flow of goods and services 2 to the income and expenditure accounts by means of the introduction of a production account into the system. The conceptual description of the accounts is then extended in the other direction to include, in addition to transactions in goods and services, transactions in financial claims. This outline of a complete system of transactions related to the National Accounts is followed by a detailed description of the present set of income and expenditure accounts and related tables which are contained in this volume. In Section D, the principles of industrial classification used for describing the production process in the economy are contrasted with those of the sector classification used for income, expenditure, and financial transactions.
- 3. A number of changes in concept and terminology in Canada's National Accounts have been introduced in this report. The principal changes are as follows:

- 4. The change in inventories is now calculated as the value of the physical change in inventories instead of the change in the book value of inventories and an inventory valuation adjustment is made in computing National Income (see paragraphs 48 and 94-95).
- 5. All interest on the public debt is now treated as a transfer payment (see paragraphs 82-83).
- 6. A rent is now imputed on government-owned buildings (see paragraphs 30 and 44).
- 7. Bad debt allowances of corporations are no longer treated as part of personal income (see footnote to paragraph 128).
- 8. A new concept "gross domestic product at factor cost" has been introduced and replaces National Income in the industrial distribution (see footnote to paragraph 73, paragraphs 183-186, and Tables 4 and 21).
- 9. In the industrial distribution, government as an industry is no longer indentical with government as a sector (see paragraph 179).
- 10. The term "business gross fixed capital formation" replaces "gross domestic investment (ex inventories)" (see paragraphs 36 and 45).
- 11. The term "capital consumption allowances and miscellaneous valuation adjustments" is used instead of "depreciation allowances and similar business costs" (see paragraph 59).
- 12. "Net foreign investment" is now termed "surplus or deficit on current account (on transactions relating to the National Accounts) with non-residents" (see paragraph 42).
- 13. The term "rent, interest, and miscellaneous investment income" is now used instead of "investment income excluding corporation profits" or "other investment income" (see paragraph 81).
- 14. The treatment of purchases of used motor vehicles by persons from businesses has been changed. The total amount paid by persons less the value of trade-ins is now included in personal expenditure on consumer goods and services (see paragraphs 43 and 69).

<sup>1.</sup> See also S.A. Goldberg and F.H. Leacy, "The National Accounts: Whither Now?", Canadian Journal of Economics and Political Science, XXII (Feb., 1956), 73-91.

<sup>73-91.
2.</sup> For example, see the table published in D.B.S. Reference Paper No. 72, The Inter-Industry Flow of Goods and Services, Canada, 1949 (Ottawa, 1956).

### Section A

# HISTORICAL DEVELOPMENT AND USES OF THE NATIONAL ACCOUNTS

## HISTORICAL DEVELOPMENT

15. The Canadian National Accounts in their present form are of comparatively recent origin. Although the first estimates of National Income in Canada appeared in 19193, recent years have seen a great intensification of activity in the field, both in Canada and in other countries. The major impetus for this work has been the need to provide a framework for describing and studying the economic system. This need was made more compelling by the experiences of the great depression, the economic problems brought forward by the Second World War, and the problems of the post-war transition period. In this atmosphere, economists and statisticians have been challenged to improve and enlarge their theoretical framework and to strengthen and systematize the collection of quantitative data.

16. The early work on National Income in Canada was concerned mainly with the estimation of National Income from industrial production statistics. There were many difficulties, however, in estimating the net output of the service industries. As a result this method of estimation was abandoned in the latter part of the 1930's in favour of an attempt to use statistics of incomes received by persons. In the mid-1940's, the method shifted from the attempt to make a single estimate of the nation's production to the construction of a comprehensive set of balancing accounts which measures by two largely independent methods the value of output and which provides statistics on the size, composition, and distribution of the nation's production. At the same time these accounts trace the underlying network of income and expenditure transactions taking place among the different sectors of the economy. The National Accounts, Income and Expenditure can thus be viewed as a method of describing economic activity in terms of transactions which take place between different parts of the economy as well as a means of estimating the nation's output.

17. The Canadian work on national accounting has gone forward at the same time that similar developments were taking place in other countries. Indeed, the main essentials of the system as it stands today were put together during the course of discussions among representatives of the United States, the United Kingdom, and Canada in September, 1944, at which time a large measure of clarification and agreement was reached 1. In recent years, discussions in technical journals, in official government reports, and in the National Bureau of Eco-

nomic Research Conferences on Research in Income and Wealth and the Conferences of the International Association for Research in Income and Wealth have gone far toward building up a comprehensive body of literature in the field. The work of the United Nations has also done much to disseminate and systematize the results of these studies. The Canadian National Accounts have benefitted from all of these developments<sup>5</sup>.

#### USES

18. Since the National Accounts combine millions of individual economic transactions into manageable statistical summaries and present this information in an interrelated framework for the economy as a whole, they have numerous applications in the field of economic decision-making. A major use is in the field of economic public policy, where they provide basic background information on the state of the economy, as well as a structural system within which specific proposals can be examined and tested for consistency. Economic measures designed to counter depression, combat inflation, or mobilize resources for defence or war are important examples in the field of public policy where a firmly based knowledge of the functioning of the economy is an indispensable guide to action. In Canada, the presentation of the annual federal budget against the economic background of the National Accounts provides a practical illustration of their use in the general area of public policy formulation.

<sup>5.</sup> Recommendations on international standards were presented in United Nations, Studies and Reports on Statistical Methods, No. 7 Measurement of National Income and the Construction of Social Accounts with an Appendix by Richard Stone, "Definition and Measurement of the National Income and Related Totals" (Geneva: United National Income and Related Totals' (Geneva: United Nations, 1947) and revised in United Nations Studies in Methods, Series F, No. 2, A System of National Accounts and Supporting Tables (New York: United Nations, 1953). See also Organization for European Economic Co-operation, A Standardized System of National Accounts (Paris: Organization for European Economic Co-operation, 1952). Some comparison of conservation and different countries may be found in United cepts used in different countries may be found in United Nations Studies in Methods, Series F, No. 8, Methods of National Income Estimation (New York: United Nations, 1955). The concepts used in the United Kingdom are Statistics: Sources and Methods (London: Her Majesty's Stationery Office, 1956) and those used in the United States in U.S. Department of Commerce, National Income, 1954 Edition: A Supplement to the Survey of Current Reviews (Westington: U.S. Corrent Privince Office) Business (Washington: U.S. Government Printing Office, 1954). Further discussion of the United States Accounts is in National Bureau of Economic Research, Conference on Research in Income and Wealth, Studies in Income and Wealth, Vol. XXII, "A Critique of the United States Income and Product Accounts" (Princeton: Princeton University Press, forthcoming) and in The National Economic Accounts of the United States, Hearings before the Subcommittee on Economic Statistics of the Joint Economic Committee, Congress of the United States, Eighty-fifth Congress, October 29 and 30, 1957 (Washington: U.S. Government Printing Office, 1957).

<sup>3.</sup> See S.A. Goldberg, "The Development of National Accounts in Canada", Canadian Journal of Economics and Political Science, XV (Feb., 1949), 34-52.

<sup>4.</sup> See Edward F. Denison, "Report on the Tripartite Discussions of National Income Measurement", National Bureau of Economic Research, Conference on Research in Income and Wealth, Studies in Income and Wealth, Vol. X (New York, 1947), pp. 3-22.

- 19. A system of National Accounts also provides the business community with a set of tools for appraising the course of economic events. Judgments and estimates of the future, explicit or implicit, are part and parcel of the processes of economic life. The National Accounts provide much of the relevant background information for the businessman who must assess the economic outlook and adapt his policies to meet emerging trends.
- 20. An important administrative use of the Accounts in Canada was their adoption by the federal and provincial governments as the basis of adjusting the federal tax rental payments to the provinces in the period 1947-1957. A further administrative use of the Accounts is in connection with Canada's contribution to international organizations. The National Accounts provide statistics for assessing national contributions.
- 21. Turning to the general field of education, the National Accounts provide a convenient framework within which economic questions of public concern can be considered in their quantitative aspects. Today, the habit of looking at economic problems in quantitative terms and in relation to overall economic magnitudes is much more widespread. This development has been accompanied by an increasing use of the empirical framework represented by the Accounts as an expository device in the teaching of economics.
- 22. Finally, a set of National Accounts has important technical uses in establishing priorities and

in enforcing consistency in statistical collection. Not only are the Accounts internally consistent in themselves, but, since they touch upon all economic activity in the economy, further extensions of the general body of economic statistics are more efficiently considered in terms of comparability with them.

23. This brief outline of the uses of the National Accounts would be incomplete without drawing attention to a vital principle of economic analysis which lies at the heart of the system - the interrelatedness of economic variables to each other and to the whole. Thus, the National Accounts are designed to reveal, not only movements of statistical aggregates over time, but also important information about the structural properties of the economy. For example, it is relevant to know what part of the total product of an economy is dependent on international trade; the extent to which capital formation in Canada has been made possible by the saving of Canadians and the extent to which there has been a net utilization of resources from abroad in the form of the deficit on current account with non-residents; the various sources of national saving; the relative amount of production originating in various industries such as agriculture, manufacturing, and trade; the role of government transfers and taxes in the income stream; the geographical distribution of income payments; the utilization of output among the major spending groups; and so on. This emphasis on comprehensiveness and interrelatedness is the major feature of the accounting system presented in this report.

## Section B

## THE MEASUREMENT OF THE GROSS NATIONAL PRODUCT

### THE CONCEPT OF GROSS NATIONAL PRODUCT

- 24. At any moment of time an economy possesses certain natural resources, a labour force of a given size, accumulated technological and entrepreneurial knowledge, and goods produced in past periods and accumulated for future consumption or as a means of producing future goods and services. An important measure of the level of economic activity is the quantity of goods and services that are produced by an economy during a period of time with its given resources.
- 25. While to many people the idea of production is restricted to the activities of a manufacturing plant, a mine, or a farm, to the economist any process that creates value or adds value to already existing goods is production. Thus, while the transformation of raw materials into finished goods is obviously production, the transportation of these goods from the factory to the market where they can be sold is also production. The distribution of these goods through wholesale and retail trade channels

- to the user adds value since goods which were inaccessible to the user now become available. Production may also occur which has little, if any, connection with goods. The services provided by a physician or lawyer and the entertainment of an actor all create value and are therefore production<sup>6</sup>.
- 26. The use of value as a criterion permits comparison of the relative amounts produced by different types of production and provides a measuring rod by means of which heterogenous goods and services can be added together and expressed as a value total. It also follows that each item entering into the value of production total is capable of being expressed in terms of a physical volume component and a price component.

<sup>6.</sup> Richard Stone has defined production as "bringing into being goods and services (or perhaps more strictly the utilities associated with these) on which members of the community or the community as a whole through its agents set a valuation". The Role of Measurement in Economics (Cambridge, 1951), pp. 38-39.

- 27. The value that is used as the measuring rod is the current market value of the goods or service?. Thus, all production that enters into the market place is included in the national income statistician's measure of output. The boundary of what is included in production is extended to include all output of enterprises producing goods and services for sale even though some of this output is not actually sold. Thus, all farm output, whether sold or whether consumed on the farm by the farmer and his family, is included in output. Although the bulk of farm output is sold, much farm produce is consumed on the farm by the farmer and his family. Since these crops, livestock, and livestock products are usually produced together with commercial output, the physical volume can be counted at the same time as the commercial crop is counted and it can be valued at the market price of the commercial crop. This extension of the boundary of production to include an imputed value of nonmarket production of business enterprises means that the national income statistician's measure of output will not vary according to whether the output of such enterprises is sold or whether it is consumed by the producer. Moreover, when imputed transactions are added to market transactions the economist's knowledge of changes in market transactions is furthered since he can now state whether a change in the volume of market transactions represented an increase in production or merely a shift from consumption by producers to market sales.
- 28. Government activity is also included within the boundary of production. Part of government activity is conducted by enterprises such as the Canadian National Railways whose motivation is similar to non-government business enterprises and these government business enterprises are therefore treated as being similar to other business enterprises. The non-commercial activities of governments are also included within the boundary of production. Since no market prices exist for government services, the output is valued at the cost of production (see paragraphs 136-138).
- 29. Household production which is consumed by the producer or members of the same household is considered to be outside the boundary of production. Following this rule excludes production which is similar in some respects to market production. For example, the work of a housewife in preparing meals is not unlike work done in a restaurant. The housewife may also scrub floors or hire a domestic servant to do this. The exclusion of housewives' services from the nation's output means that the measure of total output will vary if there is any shift in the proportion of housework the wife does herself and the proportion done by hired persons.

- The same principle is true of many chores done by the man of the house, which are also excluded from the nation's output; any shift in the direction of having these services performed by hired persons will result in an increase in the national output. Statistically, it would be very difficult to measure the physical volume of household production and to find a suitable valuation for it. Moreover, on theoretical grounds an important distinction can be drawn between business output and household production which is carried on without the intent of selling the product.
- 30. Certain household activities are very similar to market activities and are therefore included in the measure of production, for example, the operation of owner-occupied residential dwellings. Such an owner-occupant is considered for national income purposes to be operating a business enterprise and is treated as a landlord who rents the house to himself as a consumer. For similar reasons a rent is imputed on government-owned buildings which are used by the government. These two imputations again have the effect that the measure of production will not vary when shifts occur between owner-occupancy and the renting of residential dwellings and government buildings.
- 31. Other cases in which imputations are made to include transactions which do not involve the exchange of money or claims on money for goods and services are the imputation of a value to board and lodging given to workers in lieu of or in addition to wages, and an estimated value of services rendered by banks without specific charge (see paragraphs 150-151). It should be noted that, at present, imputations are made only for non-market transactions involving business and persons or business and governments or governments and persons. Imputations for transactions between business only redistribute the contribution to output and do not change the level. All imputations contained in the expenditure of persons or governments are contained in Table 49.
- 32. A further clarification of the boundary of production is made to distinguish between production by residents of Canada national output and production within the geographic boundaries of Canada domestic output. Residents of Canada may contribute to production which occurs in other countries by working in those countries while residing in Canada (e.g. workers in Detroit living in Windsor) or by lending money to firms in other countries. Similarly, non-residents of Canada may contribute to production in Canada by lending money to or purchasing shares in Canadian firms.
- 33. "Residents" means both individuals and institutions such as government agencies, corporations, and non-profit institutions which are normally resident in Canada. Thus, tourists or commercial travellers travelling abroad are treated as normal residents but citizens who usually live abroad are not. Members of diplomatic and consular staffs, official missions and armed forces abroad are

<sup>7.</sup> Throughout Part II of this publication the discussion concerns only the estimates of Gross National Product at current market prices. The techniques of estimating in dollars of a base year in order to measure the change in the physical volume component are explained in Section E of Part III, Sources and Methods.

considered residents of Canada while such personnel stationed in Canada by other countries are considered resident of those countries. The term "Canadians" will be used to mean residents of Canada in the above sense.

34. The concept of product which forms the keystone of the National Accounts is known as the Gross National Product at market price. It is the market value of the unduplicated total of goods and services produced in a given period (usually a year or a quarter) within the boundaries of production as defined above by Canadian residents. It is possible to measure the Gross National Product in at least two different ways. The first is by measuring the unduplicated expenditure of Canadians plus exports and subtracting imports; the second is to add together the incomes of Canadian residents from the production of goods and services (the National Income), indirect taxes less subsidies on production and imported goods, and capital consumption allowances. The next two parts of this section will be devoted to these two approaches of measuring the Gross National Product. In the course of explaining the second method it will be pointed out that a third method is possible - summing values added in production by industries. Because of statistical difficulties this method is no longer used in Canada to estimate the level of Gross National Product.

#### THE EXPENDITURE APPROACH

### (a) Gross National Expenditure

35. The following simple example may help to illustrate the first approach to measuring unduplicated output. Wheat produced on the prairies is shipped by rail to the head of the lakes where it is ground into flour and the flour is then used by a baker to make a loaf of bread which is sold to a household. If the value of the wheat, the value of the services of the railway, the value of the flour, and the value of the delivered loaf of bread are all counted separately in the nation's output, the value of the wheat, for example, would then be counted three times: once when produced, once again when the flour is counted, and once again when the bread is counted. One way to eliminate this multiple counting is to count only the value of the final output; thus, only the delivered value of the loaf of bread would be counted since the value of the wheat, the value of the railway services, and the value of the flour are all incorporated into it.

36. The definition of final output is in principle a simple one although problems may arise in practice. If a good or a service produced by an industry (e.g. iron ore) or imported (e.g. bauxite) is used by an industry to produce other goods and services (e.g. automobiles) during the accounting period under consideration, it is said to be intermediate output. If the good or service is not so used, it is final output (e.g. automobiles). As a first approximation, intermediate output may be

thought of as the sum of purchases charged to current expense by business, while final output corresponds to all other purchases of goods and services in the economy. Final output may go outside business<sup>8</sup> (to persons or to governments), outside the country (exported), or be retained by business (e.g. machinery) for use in producing goods and services in future periods (fixed capital formation<sup>9</sup>), or may represent an addition to business inventories of raw materials, goods in process, or finished goods.

37. An estimate of Gross National Product utilizing expenditure statistics can therefore be made as follows: Add together all personal expenditure on consumer goods and services, plus government expenditure on goods and services, plus exports of goods and services, plus business expenditure on gross fixed capital formation, plus the value of the physical change in the inventories of business 10 i.e. total final purchases by Canadians plus exports plus the value of the physical change in business inventories. Some of the goods and services purchased may have been produced in other countries (e.g. imported oranges) or have been made using imported materials (e.g. bauxite contained in aluminum cooking utensils). To arrive at total expenditure on the final output of Canadians during the period, total imports of goods and services must be subtracted from total final purchases plus the value of the physical change in inventories. The estimate of Gross National Product obtained in this manner is called Gross National Expenditure at market prices to indicate that the output total has been derived from expenditures data. It should be noted that an item of expenditure may be on goods produced in earlier periods. In this case, however, business inventories are reduced so that only the value of goods produced in the current period enter into the total Gross National Expenditure 11.

### (b) National Saving and Capital Formation

38. Business fixed capital formation may take the form either of adding to the stock of new residential buildings, new non-residential buildings and other construction, or new machinery and equipment. Fixed capital formation may be either gross or net. Net fixed capital formation is after deduction from the gross figure of allowances for capital consumption valued at current prices — depreciation allowances, obsolescence, and accidental damage to fixed capital<sup>12</sup>. At present, however, capital

8. For definitions of business, persons, governments, and non-residents see paragraph 98.

10. These items are defined more fully in para-

graphs 43-51.

11. For the treatment of purchase of used motor vehicles by persons from business see paragraph 69.

<sup>9.</sup> Since the term investment is sometimes used to signify the acquisition of securities and other financial claims, the term "business gross fixed capital formation" is now used instead of "gross domestic investment (ex inventories)" which appeared in earlier publications.

<sup>12.</sup> See United Nations Studies in Methods, Series F, No. 3, Concepts and Definitions of Capital Formation (New York: United Nations, 1953).

consumption allowances cannot be separated from certain valuation adjustments (as is explained in paragraphs 59 and 61) and until this separation is made, the item "capital consumption allowances and miscellaneous valuation adjustments" cannot be subtracted from business gross fixed capital formation to arrive at business net fixed capital formation.

- 39. In the Canadian National Accounts business and government expenditure totals are shown separately. For some purposes, however, it may be desirable to add government gross fixed capital formation. To facilitate this, this item is shown separately in Table 2; thus, the reader who wishes to obtain total private and public new investment as published in Department of Trade and Commerce, Private and Public Investment in Canada, Outlook 1958 (and earlier publications), may do so by adding together government gross fixed capital formation and business gross fixed capital formation. (See also the reconciliation statement in Table 54).
- 40. Total production less personal expenditure on consumer goods and services less government expenditure on goods and services is defined to be total national saving. Total national saving is therefore identical in amount with total business gross fixed capital formation plus the value of the physical change in inventories plus the surplus or minus the deficit on current account with non-residents. Expressing these fundamental identities in equation form:

Gross National Product at market prices—personal expenditure on consumer goods and services—government expenditure on goods and services = national saving.

National saving = business gross fixed capital formation + the value of the physical change in inventories + exports of goods and services — imports of goods and services.

- **41.** It may be noted that persons, governments, and businesses all contribute to national saving. The sources of national saving are shown in Table 17.
- **42.** The excess of exports over imports (the surplus on current account with non-residents) represents a net amount of goods and services Canadians have made available for the use of non-residents during the period <sup>14</sup> If imports exceed

13. This item includes capital defence expenditure on construction but excludes outlays for equipment for the Department of National Defence. The implications of treating this part of government expenditure as capital formation throughout the sector accounts are explained in paragraph 166.

exports (a deficit on current account), non-residents have made a net amount of goods and services available for use by Canadians during the period. In this case to indicate that a net contribution to the resources available to Canadians has been made by non-residents, the deficit on current account is sometimes transposed to the other side of the second equation to obtain:

National saving + deficit on current account with non-residents = business gross fixed capital formation + the value of the physical change in inventories.

- (c) Definitions of Components of Gross National Expenditure
  - (i) Personal expenditure on consumer goods and services
- 43. Personal expenditure on consumer goods and services includes personal outlays for durable goods, non-durable goods, and services. Free board and lodging and other income in kind are also included in personal expenditure as if persons received income equal to the value of the goods and services and then purchased these items. The purchases of houses and other residential buildings are, however, regarded as business fixed capital formation but, as explained earlier, an imputed rent on owner-occupied houses is included in personal expenditure. Also included in personal expenditure are expenditures on services assumed to be equal to the operating costs of private non-commercial institutions and the operating costs and profits of insurance companies (see paragraphs 123-125). The estimate includes expenditures of Canadian residents temporarily abroad (e.g. tourists, members of the armed forces); these expenditures are also included in imports. An adjustment is made to the total estimate of personal expenditure to exclude expenditures of foreign residents temporarily in Canada since this expenditure is included in exports. All expenditures that are regarded as business costs are excluded. The value of used goods sold by persons to business and the value of trade-ins are deducted from the total amount of purchases by persons. Intra-personal transactions in used merchandise, including those effected through dealers in second-hand goods, are excluded.
- (ii) Government expenditure on goods and services
- 44. This component consists of the outlays of federal, provincial, and municipal governments (except for government business enterprises but including municipal school services) for goods and services. This total expenditure includes both current expenditure such as the operating expenses of government departments involving expenditure on wages and salaries, office supplies, and so forth, and government gross fixed capital formation which includes outlays on government housing, on new non-residential buildings and highways, and on new machinery and equipment. Government expenditure on goods and services thus consists of purchases from Canadian business and non-residents; foreign aid; wages and salaries of government employees; military pay and allowances, including

<sup>14.</sup> See also paragraphs 57 and 161 for adjustments that should be made to national saving and to the current account surplus or deficit to measure properly the net contribution of non-residents to the savings used for capital formation in Canada. See also D.B.S., Canada's International Investment Position, 1926-1954 (Ottawa, 1956), pp. 45-47 and D.B.S., The Canadian Balance of International Payments, 1956 (Ottawa, 1957), pp. 31-32.

that paid abroad; other military expenditures abroad; and an imputed net rent and capital consumption allowances on government-owned buildings. Government expenditure on goods and services should not be confused with budgetary government expenditure since the letter includes such items as transfer payments and subsidies (see paragraphs 143-148).

### (iii) Business gross fixed capital formation

- 45. Business gross fixed capital formation, as defined in the National Accounts, includes expenditures of business for new construction and new machinery and equipment. Expenditures of persons for new residential dwellings (including garages and major improvements and alterations) are also included, since individuals, in their capacity as home-owners, are treated as business enterprisers.
- 46. Estimates of expenditure on new construction and new machinery and equipment are on a "gross" basis, in the sense that no allowance for depreciation or obsolescence of existing capital facilities has been deducted. Estimates of net capital formation for the economy as a whole have not, as yet, been made.
- 47. Only new construction and new machinery and equipment are included; purchases of land, used buildings, and second-hand machinery and equipment are excluded since they do not represent current production of goods and services. Imported used machinery and equipment are "new" as far as Canada is concerned and represent an addition to the total stock of capital equipment in Canada; such purchases are therefore included in expenditure on fixed capital. Replacements and major alterations are treated as capital formation, but ordinary repair and maintenance expenditures are not. The theoretical distinction between capital and current outlay broadly resembles that adopted for the purpose of measuring net income for income tax purposes; however, certain specified expenditures (such as office furniture and equipment and small tools) which may be treated by business as current operating expenses, are included here as "capital outlay charged to current expense" (see paragraph 62).

### (iv) Value of the physical change in inventories

48. The net change during the year of business holdings of inventories must be included in the Gross National Expenditure in order to allow for that portion of current production which has not yet been sold (positive change in inventories), or to eliminate that portion of previous years' production which is included in sales of the current year (negative change in inventories). The change in the value of inventories relevant to Gross National Expenditure should reflect a change in physical volume valued at the average market prices of the period. This change is referred to as the value of the physical change in inventories. Because the value of inventories carried on the books of businessmen may contain different price components, depending upon the accounting conventions in use, an inventory valuation adjustment is made to book values as reported to the Dominion Bureau of Statistics to arrive at a valuation consistent with the other components of Gross National Expenditure (see paragraphs 94-95)<sup>15</sup>.

### (v) Exports and imports of goods and services

- 49. It should be noted that the terms "exports and imports of goods and services" are used here in a broad sense; interest and dividends received from non-residents are included with the export series, while interest and dividends paid to non-residents are included with the import series 16. In addition, gold production available for export, travel expenditure of non-residents in Canada, and freight and shipping credits earned on Canadian account, are included in the export figure; travel expenditures of Canadians abroad and freight and shipping charges incurred by Canada on foreign account are included with the import series. Also included are such unilateral transactions as official contributions and personal and institutional remittances of a benevolent character.
- 50. The figures appearing in Gross National Expenditure are the total receipts and payments on international current account published in D.B.S., The Canadian Balance of International Payments and adjusted to conform to National Accounts concepts. For current years, two adjustments are necessary to bring these figures into line with National Accounts definitions: (a) inheritances and emigrants' funds are deducted from gross payments (imports) and inheritances and immigrants' funds are deducted from gross receipts (exports), and (b) Mutual Aid to NATO Countries is omitted from both total receipts and total payments. In the former case, the items, which are unilateral financial transactions reflecting the transfer of accumulated savings, do not correspond to payments for goods and services, nor are they related to the production of goods and services in Canada; they are therefore excluded from Gross National Expenditure. In the latter case, the amounts involved are either included in government expenditure or represent shipments of previously produced goods and services not forming a part of current Gross National Product. See Table 55 for a reconciliation statement with the Balance of International Payments.
- 51. It may be noted that defence installations built in Canada but paid for by foreign governments are treated as goods sold to non-residents (exports) in the year in which they were constructed. If they

15. The government by concept does not hold inventories since net purchases of government commodity agencies (except government business enterprises) are not treated as inventories in the Accounts.

<sup>16.</sup> Used goods, as well as new goods, are included in these series. From the view point of Canada, there is little distinction between imports of newly-produced goods and goods used in other countries before being imported into Canada. They are all "new" goods to Canada. Exports of used goods by Canadian business represent either reductions in business inventories or an offset to new fixed capital formation (see paragraph 68).

are subsequently purchased by the Canadian government, they are an import and a government expenditure item in the year of purchase 17.

#### THE INCOME APPROACH

#### (a) The National Income

52. Another method of measuring unduplicated production is to look at the incomes generated by production at each stage. That production can be measured by measuring income can be seen if the task is first approached by defining unduplicated output at each stage of production and then showing that this unduplicated output is equal to the incomes generated plus two non-income items included in market prices. Returning to the simplified example, at stage one the value of the wheat would be counted as production. At stage two, however, instead of counting the flour, the "value added" at this stage would be counted. This would equal the value of the flour produced less the delivered cost of the wheat and other goods and services produced by industries or imported and used to produce and and sell the flour 18. At the third stage, the value added would be the value of the bread produced less the delivered cost of the flour and other goods and services produced by industries or imported and used to produce the bread. The sum of these values added equals the total market value of the bread.

53. Looked at from a different point of view, this value added represents all components of the value of output not deducted as a cost of materials or other goods used or as the cost of services purchased from other businesses. The components of value added at market prices include therefore the amounts received by the factors of production land, labour, capital, and entrepreneurship - plus capital consumption allowances 19 and indirect taxes less subsidies<sup>20</sup>. In the above simplified example, the value added by the wheat farmer is his net income, plus wages and salaries paid to his employees, plus capital consumption allowances on his tractors and other equipment and on his farm buildings. Similarly, the value added by the flour miller is the profit (which may be either a corporation profit or the net income of unincorporated business, depending on the form of organization of the firm), wages and salaries paid to the employees. interest paid on bonds issued by the company. capital consumption allowances on buildings and equipment, and property taxes. The value added by

the baker would have a similar content. In this case it might include instead of interest on bonds, the payment of a net rent for the use of rented buildings. If there were a sales tax on the sale of bread, such a tax would be included in the market price of the bread and would be included in the residual value added.

- The incomes of the various factors of production are divided into six categories in the Canadian accounts21: (i) wages, salaries, and supplementary labour income, (ii) military pay and allowances, (iii) corporation profits before taxes, (iv) rent, interest, and miscellaneous investment income, (v) accrued net income of farm operators from farm production, and (vi) net income of nonfarm unincorporated business. The total of these six items is the National Income - the sum of factor incomes accruing to Canadian residents. It should be noted that factor incomes exclude all transfer payments - payments which are not in exchange for the services of a factor of production. Thus, income such as old age pensions and family allowances are excluded from the National Income.
- 55. Unfortunately, not all categories of National Income conform to a classification of returns to the various factors of production. The net income of unincorporated business, for example, includes a return to the proprietor for the labour he himself supplies to the business, a return on the capital he invests, and a profit in the sense of a reward for entrepreneurship. Similarly, net rents contain a mixture of returns for various functions performed by the landlord, not simply a return for the use of land or buildings.
- 56. Conceptually, there are therefore three methods of measuring Gross National Product at market prices: (i) summing final purchases by Canadians plus exports plus the value of the physical change in business inventories less imports, (ii) summing factor incomes plus capital consumption allowances plus indirect taxes less subsidies, and (iii) summing values added by industries and adding indirect taxes less subsidies<sup>22</sup>. In Canada, for statistical

<sup>21.</sup> These items are explained in detail in paragraphs 76-93.

<sup>22.</sup> A set of accounts depicting the inter-industry flow of goods and services (intermediate output) which is cancelled out in arriving at final output or value added has been constructed for the year 1949 and published in Dominion Bureau of Statistics Reference Paper No. 72, The Inter-Industry Flow of Goods and Services, Canada, 1949 (Ottawa, 1956). The inter-industry flow table (or input-output table) studies from two points of view the output of forty-two industry groups covering all producers of goods and services in the economy. Each column of the table shows for an industry group: (i) the cost of the various materials and other goods and services used in production classified according to the industry which produced these goods and services, and (ii) the value added by the industry. Each row of the table shows for an industry: (i) the users of the intermediate output of the industry, and (ii) the final output of the industry classified by the sector making the expenditure on output. By means of such a table and by making certain simplifying assumptions about the relation of inputs to output in each industry, it is possible to relate the final output of an industry group to the intermediate output of other industries, to imports of intermediate goods and services, and to the value added by various industries.

<sup>17.</sup> An exception has been made in the past in the National Accounts for expenditure of the United States government in Canada during the Second World War on the Alaska highway and the Northern Staging Route. This expenditure was included in business gross fixed capital formation.

<sup>18.</sup> Only services purchased from other businesses such as advertising agencies, consulting engineers, and so forth are deducted. The services of the factors of production are included in value added. See the next paragraph.

<sup>19.</sup> For definition see paragraphs 59-71.20. For definition see paragraphs 72-75.

reasons, only the first two methods are used. As can be seen from the above discussion, these two methods should yield two indentical measures of the Gross National Product at market prices. In practice, these two methods do not give exactly the same figure because of statistical discrepancies. The difference between the figures is called the residual error of estimate and half the residual error is added to the lower figure and half subtracted from the larger; thus, the figure used to represent the Gross National Product is the average of the figures obtained by the two largely independent methods of measurement.

57. It was explained earlier that the term "national" is used to indicate that the output of Canadian residents is being measured. The Gross National Product is a measure of the total output of residents of Canada; i.e. it is a measure of national output. To arrive at a measure of output produced in Canada (domestic output), it is necessary to add to national output factor incomes paid to non-residents as a result of production occurring within Canada and to subtract factor incomes paid to Canadian residents as a result of production occurring abroad. At present, because of statistical problems, adjustment is made only for interest and dividends paid to non-residents and received from non-residents. Conceptually, however, adjustment should also be made for other income payments to and receipts from nonresidents, such as rental income, labour income, and undistributed profits accruing on behalf of non-resident stockholders.

58. The next two sections summarize the reasons for using the terms "gross" and "at market prices" in describing Gross National Product.

#### (b) Consumption of Fixed Capital

Gross National Product is a "gross" measure since output is measured before deduction of allowances for the consumption of fixed capital. If capital consumption allowances have been deducted, the product is said to be "net" since it is after the deduction of output necessary to replace capital used up by wear, tear, obsolescence, or other destruction during the period. The item "capital consumption allowances and miscellaneous valuation adjustments" includes, however, two classes which are at present not completely separable: an allowance for consumption of fixed capital in the economy, and various valuation adjustments arising from differences in the concepts of income and capital consumption as reflected in business accounting records and the corresponding concepts used in National Accounts. The positive items included under this entry and listed below must be added in the course of calculating Gross National Product since, in general, they represent costs of production which cannot be classed as returns to the factors of production. On the other hand, other items are negative entries. There are basically income or profit adjustments and are subtracted in arriving at Gross National Product. Until the valuation adjustments can be separated from capital consumption allowances, the item "capital consumption allowances and miscellaneous valuation adjustments" cannot be subtracted from business gross fixed capital formation to arrive at net fixed capital formation.

60. By definition, Gross National Product includes the value of capital produced in previous years but consumed during the current period. For example, assume a shoe manufacturer purchases a machine for \$3,000. The value of the machine enters into business gross fixed capital formation in the year in which it is purchased. If the life of the machine is expected to be ten years, the manufacturer may charge as a current operating expense each year \$300 depreciation allowance on the machine. The selling value of the shoes sold by this manufacturer will therefore include \$300 per year for ten years to charge the consumption of the machine to the purchaser of shoes. Over the ten-year period personal expenditure on consumer goods will therefore include \$3,000 representing the cost of the machine. The case where the machine is sold before being fully depreciated is discussed in paragraphs 68-69.

### (i) Depreciation (positive)

61. This includes allowances for depreciation on business fixed capital, residential housing, capital equipment of some types of private non-commercial institutions (e.g. municipal hospitals), and government-owned buildings<sup>23</sup>. Ideally, estimates of depreciation allowances should be at current replacement prices so that when capital consumption allowances are deducted from gross fixed capital formation, the resulting net capital formation estimate is at current prices. To achieve the ideal valuation, the actual "wear and tear" of the assets should be estimated and the assets revalued in current dollars. In other words, what it would cost in the current year to replace the amounts represented by the wear and tear of the capital during the year should be estimated. The available book value figures on depreciation are valued, however, at original cost, i.e. in dollars of the year in which the capital good was purchased (except for residential buildings where a replacement cost basis is used). Moreover, book value figures are also deficient in that they are based on an assumed life of assets which, in general, is arbitrarily calculated for taxation purposes and is affected by changes in tax laws. The difference between the book value and the ideal current replacement value estimates may be thought of as a "depreciation valuation adjustment". If it were possible to make this valuation adjustment, the Gross National Product would not change since the amount deducted from (or added to) depreciation would be added to (or deducted from) profits. National Income would change, however, by the amount of the depreciation valuation adjustment. For the present, the depreciation valuation adjustment is not made explicit because of statistical difficulties.

<sup>23.</sup> No allowance for depreciation is made for other government assets such as highways, roads and canals. Depletion allowances are not included in depreciation allowances, see paragraph 80.

# (ii) Capital outlay charged to current expense (positive)

The definition of fixed capital formation for the National Accounts is framed in terms of the tangibility and durability of the goods in question. Certain durable items, however, such as furniture, office equipment, tools, and so forth are sometimes not capitalized by business but are charged as a current expense. In order to include all these durable equipment items in capital formation in the National Accounts, these capital outlays charged to current expense are included in business gross fixed capital formation and therefore in Gross National Expenditure. To balance the Accounts, this capital outlay charged to current expense is included in capital consumption allowances and is therefore also included on the income side. In other words, the assumption is made that these items are all used up in the year in which they are purchased.

## (iii) Non-capital outlays charged to capital account (negative)

- 63. Certain outlays on non-tangible items are sometimes capitalized by business. In keeping with the tangibility criterion used in the National Accounts for defining gross fixed capital formation, these items are excluded from capital formation. In order to keep the accounts in balance a negative entry is included in the item capital consumption allowances and miscellaneous valuation adjustments. This negative entry may be thought of as a "capital valuation adjustment" and in this way offsetting profits similarly to the depreciation valuation adjustment. These capital valuation adjustments consist of three items.
- 64. Mining development and exploration costs which involve acquisitions of tangible durable equipment, construction or drilling are included in capital formation. Exploration costs such as geophysical surveys are, however, excluded from capital formation in the National Accounts (even though capitalized by business) since these costs do not give rise to tangible assets. These latter exploration costs are therefore treated on the income side as a negative capital valuation adjustment.
- 65. The second adjustment is for brokerage fees on the purchase or sale of stocks and bonds. Brokerage fees paid by individuals and governments are included with consumer and government expenditures and brokerage fees paid by businesses which engage in the selling and buying of stocks and bonds as part of their regular business are treated as a current expense by these businesses. Brokerage fees paid by other businesses and which are capitalized by those businesses are, however, treated in the National Accounts as a current expenditure. The amount of these brokerage fees is, therefore, deducted as a capital valuation adjustment.

66. The third capital valuation adjustment concerns real estate commissions. All commissions explicitly or implicitly forming part of the purchase price of a newly constructed building are included in the value of the building and thus enter into capital formation. Real estate commissions paid in connection with the purchase and sale of existing fixed assets do not increase the value of the stock of fixed capital in the economy and so are not regarded as capital formation. The solution adopted in the latter case is to assume that real estate commissions on existing dwellings are an element of gross rents and to deduct them in arriving at net rents (see paragraph 86). Real estate commissions on the sale of non-residential dwellings are treated as a capital valuation adjustment and included as a negative entry in the item "capital consumption allowances and miscellaneous valuation adjustments".

## (iv) Claim portion of business and residential insurance (positive)

67. The amounts paid out under insurance contracts to compensate for fire loss, etc., are equivalent to capital consumption. Such an entry is necessary to balance the income side with Gross National Expenditure since premiums paid by business, which enter into the market value of goods and services as a cost of production, are equal to operating expenses and profits of insurance companies plus claims paid out by them. In general, no additional allowance is made respecting uninsured losses, except insofar as these are included under capital outlay charged to current expense. In the case of railways, however, claims paid on losses or damage to property in transit which are charged to railway operating expenses are included in capital consumption allowances.

## (v) Scrap and salvage allowances (positive)

- 68. When business purchases a new piece of machinery and equipment, the total price of the new item could be entered into capital formation or the amount entered could be the price of the new item less the amount received for selling or trading-in the old piece of machinery and equipment. The procedure followed is to include the full purchase price of the new item in capital formation and include the receipts from scrap or salvage in capital consumption allowances. The old machinery or equipment may have been exported or sold to persons or may re-enter into the production process as raw materials of industry. In each case it is explicitly or implicitly included in Gross National Expenditure and must also, therefore, be included on the income side as a capital consumption allowance.
- 69. When a used car dealer sells a used car to a person, personal expenditure increases by the amount of the sale and business inventories decrease, leaving Gross National Expenditure unchanged. The case of the sale of used motor vehicles by a business firm other than a used car dealer to persons requires special discussion. As

was explained earlier, the full cost of an item of machinery and equipment is counted twice over a period of years in Gross National Product - once as business fixed capital formation and once in the expenditure of persons, governments, or nonresidents. Assume that the shoe manufacturer of the example in paragraph 60 purchased an automobile three years ago for \$3,000, that he has charged depreciation of \$1,000, and that he now sells the car for \$2,000 to a person. The \$1,000 depreciation charged has entered personal expenditure in the cost of shoes, the remaining \$2,000 enters personal expenditure as the purchase of a used automobile and is charged as a capital consumption allowance in the National Accounts. The \$3,000 of capital formation representing the original cost of the car is now fully written-off in the books of business. When the shoe manufacturer buys a new car, the full amount of the new purchase is entered in business fixed capital formation.

- (vi) Amortization, development write-offs, deferred maintenance, and miscellaneous charges to reserves (positive)
- 70. In the course of calculating profits, certain amortization and other charges analogous to or in lieu of depreciation have sometimes been allowed as deductions from revenue. Where this is the case, corresponding amounts are included in capital consumption allowances. Examples are found most frequently in the field of utilities, particularly those operated under government ownership and in the resource development sectors of the economy.

## (vii) Bad debt allowances (positive)

71. The amounts charged by businesses in respect to doubtful accounts, net of recoveries, enter into the market prices of goods and services but are not included in factor incomes. They are, therefore, treated as a valuation adjustment and are included as a positive entry in the item "capital consumption allowances and miscellaneous valuation adjustments"

#### (c) Market Prices and Factor Cost

- 72. The Gross National Product is valued at market prices. Excise taxes and duties, customs import duties, provincial and municipal sales taxes, property taxes, licences, and other indirect taxes are included in the value of output while subsidies, which serve to reduce the price of goods and services and which may therefore be regarded as negative taxes, are deducted. An output measure which excludes indirect taxes and includes subsidies is said to be a factor cost.
- 73. In addition to Gross National Product, the other measure of aggregate output which has been defined above is National Income. The full name of this concept is actually Net National Income at factor cost. It can be seen from this terminology that this measure differs from Gross National Product at market prices in that it is net (after

deduction of capital consumption allowances) and at factor cost (excludes indirect taxes and includes subsidies)<sup>24</sup>.

- 74. Indirect taxes represent a part of the market price of goods and services which is not received by factors of production. They are, therefore, not included in the National Income, but must be added to factor costs to arrive at total costs entering into market prices. Business accounting procedures provide a guide as to whether a tax is to be regarded as direct or indirect. Thus, all sales taxes and all taxes which are deductible as expenses from the gross revenues of business (such as property taxes) are taken as indirect. Taxes which are levied directly on net incomes, whether of individuals or corporations, are regarded as direct taxes 25. The inclusion of direct taxes in the National Income is necessary if this aggregate is not to
- 24. A measure of output which is used when measuring production by summing value added is gross domestic product at factor cost. This concept is used in Sections C and D for the sector and industrial distributions of value added and its derivation from Gross National Product figures is given in Table 4. The Dominion Bureau of Statistics is at present engaged in extending the Index of Industrial Production to cover all industries and thus measure the quarterly change in the physical volume of the gross domestic product at factor cost. See V.R. Berlinguette, "Measurement of Real Output", Canadian Journal of Economics and Political Science, XX (Feb., 1954), 59-75. A study of the annual change in the industrial distribution of gross domestic product at factor cost also appears in Wm. C. Hood and Anthony Scott, Output, Labour and Capital in the Canadian Economy (a study to be published for the Royal Commission on Canada's Economic Prospects by the Queen's Printer).

Since the words gross, net, and value added are also used by the D.B.S. Census of Industry, an explanation of the differences in usage may be helpful. In the Census of Industry the gross value of production (or shipments) obtained from an individual establishment is free of duplication from the point of view of that establishment. When gross values are summed for an industry or group of industries, double counting enters since the product of one establishment may be the material used in another. To try to overcome this difficulty the Census measures value added by manufacture (net value of production). Because of difficulties associated with the use of the establishment as the reporting unit, however, only the cost of materials, fuel, and electricity used is subtracted from the gross value of production. Thus, some output of other industries (advertising, legal, and other service expenditures, repair expenditure, office supplies, and so forth) remains in value added by manufacture. It is therefore not an unduplicated measure of output and should be regarded only as an approximation to the concept of gross domestic product at factor cost. The Census concept is approximately at factor cost since output is valued excluding excise taxes and duties and provincial and municipal sales taxes. It does, however, include property taxes, licences, and other taxes which are not a function of the level of output or sales and subsidies are excluded instead of being added in. The Census of Industry value added figures are published in D.B.S., General Review of Manufacturing Industries in Canada, 1954 (and earlier years) and D.B.S., General Review of the Mining Industry, 1955 (and earlier years). Figures for all groups of commodity-producing industries in total and by provinces are published in D.B.S., Survey of Production, 1955 (and publications for earlier years).

25. Motor vehicle taxes and other similar taxes are indirect when levied on a business since they are a business cost but are direct taxes when levied on a person since they are paid out of personal income.

vary with changes in direct tax rates. On the other hand, to include in the National Income those taxes which are not levied on factor incomes (i.e. indirect taxes) would cause the level of this aggregate to change with every change in indirect tax rates.

75. Subsidies represent amounts contributed by governments toward current costs of production. For this reason, they must be deducted from factor costs to arrive at Gross National Product at market prices.

## (d) Definitions of Components of the National Income

(i) Wages, salaries, and supplementary labour income

76. The estimated total of wages and salaries is intended to include all such payments made to residents of Canada, including payments in kind such as free board and lodging. It does not include earnings from self-employment or partnership, income from independent professional practice, income of farmers from farming operations, or military pay allowances. Wages and salaries are estimated before tax deductions, and before contributions of employees to unemployment insurance, pensions, and other social insurance schemes. Bonuses, commissions, and retroactive wage increases are included in the period in which they are paid because of the statistical difficulties of allocating these items to the period in which they were earned.

77. Supplementary labour income consists of other expenditures by employers on labour account that can be regarded as payment for employees' services. Included here are employers' contributions to pension funds, employee welfare funds, unemployment insurance, and workmen's compensation<sup>26</sup>.

#### (ii) Military pay and allowances

78. Payments to members of the armed forces in Canada and overseas are treated as compensation for services rendered. Under this heading are included military pay, dependents and subsistence allowances, clothing allowances, and the rehabilitation grant, i.e. the thirty days' extra pay and one month's extra dependents' allowance upon discharge. The rehabilitation grant is analogous to the discharge pay granted by some firms. War service gratuities and all post-discharge re-establishment benefits are excluded and treated as transfer payments. The estimated value of food and clothing issued in kind is included.

## (iii) Corporation profits before taxes

79. Corporation profits are measured before the deduction of corporation income and other direct taxes. Since they are computed on a national basis, they include the earnings of Canadian factors only. Dividends (including profits transferred to non-residents) paid to non-residents are therefore

deducted and undistributed profits relating to assets owned by non-residents should also be deducted but are not because of statistical difficulties. Since the National Income includes only earnings from the production of new goods and services, capital gains and losses are excluded.

80. The concept "profits before tax" used in the National Accounts is similar to but differs somewhat from the one employed by the Department of National Revenue for taxation purposes. Adjustments are made to the calendar year figures published by the Department of National Revenue in order to bring them into line with the definitions required for the National Accounts. Depletion charges, which are deductible for income tax purposes, are added back, since discoveries of new natural resources are not capitalized and are, therefore, not counted as part of capital formation. The exhaustion of natural resources is not regarded, therefore, as a charge against the National Income. Another adjustment is for provincial mining and logging taxes which are allowed as an expense for income tax purposes but which are added back to profits for the National Accounts. Similarly, banks calculate profits for taxation purposes after transfers to reserves but these transfers are added back to the National Income since they are not a charge against production and a deduction is then made for estimated bad debt losses. Charitable contributions made by corporations, also deductible as an expense under income tax regulations, are added back on the grounds that they are not a direct cost of production, but merely a distribution of earnings (a hansfer payment). Corporate losses are also deducted in order to bring the figures to a profits less losses basis, and an adjustment is made to eliminate profits which have been refunded to the government through renegotiation of war contracts. It should be noted that under Canadian income tax regulations, taxable profits, calculated before payment of dividends, do not include dividends received from Canadian corporations. No special allowance need therefore be made to eliminate Canadian inter-corporate dividends. The profits of co-operatives are included in the National Accounts in corporation profits.

## (iv) Rent, interest, and miscellaneous investment income

81. This component of National Income comprises the interest and net rental income of persons (excluding interest on the public debt and the transfer portion of interest on consumer debt); government investment income (excluding interest on public debt); and withholding taxes on interest, dividends, rents, and royalties paid to non-residents<sup>27</sup>. All

<sup>26.</sup> The portion of employers' contributions estimated to be for medical aid and hospitalization is not regarded as a form of employee income but as a payment by business for medical and hospital services.

<sup>27.</sup> Some interest on the public debt and interest on consumer debt are included in corporation profits. The total interest on the public debt and the transfer portion of interest on consumer debt are, however, subtracted from interest received by persons and governments. Corporation profits therefore include the amount of interest on the public debt and the transfer portion of interest on consumer debt received by corporations while the interest income of persons and governments is understated by this amount.

these components are measured before deduction of direct taxes and include the earnings of Canadian residents only.

- 82. Interest on the public debt is regarded as a transfer payment rather than as a payment to a factor of production for a productive service and is therefore excluded from the National Income. Interest on the public debt is not regarded as a cost of production in the same sense as interest paid on a loan by business to enable that business to purchase equipment for producing goods and services is so regarded. The exclusion of interest on the public debt from the National Income means that the National Income will not vary with changes in the techniques of government financing. In other words. National Income will not rise simply because the government finances its operations through borrowing rather than taxation; and it will not fall. on the other hand, if a shift occurs in the other direction. It may be noted that this same problem does not arise in the case of a business firm, where a change in the method of financing will not affect National Income because of offsetting adjustments in profits. Any resort to borrowing by business will cause the interest content of National Income to rise, but at the same time will bring about a corresponding reduction in profits, leaving National Income unchanged.
- 83. The portion of interest on the public debt which is paid to non-residents is regarded as a part of the earnings of non-residents and is included in imports of goods and services. It is a charge against domestic production which must be paid to non-residents. Since it is paid to non-residents it is not part of Canada's National Income. Receipts of interest by Canadians from foreign governments are included in the National Income.
- 84. Part of the interest on consumer debt is also treated as a transfer payment and is excluded from the National Income since all consumer outlay is treated as current consumption, except outlay on housing which is regarded as capital expenditure. Since consumer goods (except housing) cannot give rise to investment income, it is necessary to exclude interest on the debt which finances such goods, if the National Income is not to vary with the method of financing such purchases. The administrative expenses which are incurred in rendering services to borrowers are, however, included in personal expenditure and also in the Gross National Product.
- 85. Interest and net rental income of persons includes only interest and net rents received by, or accruing on behalf of, persons (defined to include individuals, private non-commercial institutions, estates, and trust funds); investment income of life insurance companies accruing on behalf of Canadian policy-holders; and small amounts of miscellaneous income. On the other hand, interest and net rents paid to corporations and government business enterprises are automatically included in the profits of these institutions and are not

- counted here. Interest paid to government is included in government investment income. Interest and net rental income of persons is made up of the following items: Canadian bond and mortgage interest and paid and imputed interest on deposits with chartered banks and similar financial institutions <sup>28</sup> received by, or accruing to, persons; net rents received by, or accruing to, persons; net royalties; interest and dividends received by persons from non-residents; and miscellaneous investment income. Interest on the public debt and the transfer portion of interest on consumer debt are excluded in total from the investment income of persons.
- 86. Net rents received by, or accruing to, persons include paid and imputed residential rents, and paid non-residential rents. Net paid rents are arrived at by taking gross rents less facility expenses such as heating costs, amortization of stoves, refrigerators, washing machines, and other facilities provided by the landlord and included in the rent to arrive at the gross rent paid for space. From this are deducted taxes, capital consumption allowances, mortgage interest, insurance, repairs, and real estate commissions on sales of existing dwellings. For owner-occupied residential dwellings (including garages), in addition to the space expenses (taxes, etc.) actually paid out by the owner, a net rent and capital consumption allowances are imputed. (The latter item is included with other capital consumption allowances.) It may be noted that imputed rents of owner-occupied premises used by business are implicitly included in the estimates of corporation profits and net income of unincorporated business, while net rents received by business are included in profits.
- 87. Miscellaneous investment income includes investment income received by life insurance companies on behalf of Canadian policy-holders, and several quantitatively unimportant miscellaneous categories of income. These are the investment income of fraternal and mutual benefit societies which, like life insurance companies, are treated as accruing to associations of individual policy-holders; interest on private pension funds; the interest credited to persons from federal government annuities account; and the profits of mutual non-life insurance companies.
- 88. Government investment income includes the profits of government business enterprises, interest on government loans and advances, and interest on government pension and social insurance funds, and excludes interest on the public debt.
- 89. Profits of government business enterprises consist of profits (less losses) of those government agencies which conduct their activities on an essentially commercial basis, setting a price for their services which is calculated to cover costs. Included here are profits of the Canadian National Railways and other crown corporations, provincial liquor control boards, and provincial and municipal public utilities such as hydro-electric systems,

<sup>28.</sup> See paragraphs 151-152.

telephone systems, street railways, and so forth. The profits of the federal Post Office Department are included here, its gross expenditures being offset against its gross revenues to arrive at an estimate of profits. As was explained earlier, a net rent is imputed on government-owned buildings and this rent is included in the profits of government business enterprises.

- 90. Interest on government loans and advances includes interest on loans to government agencies, such as various public utilities, and interest on loans to foreign and domestic governments.
- 91. Withholding taxes. When interest, dividends, rents, or royalties are paid to non-residents, the Canadian government requires that a withholding tax be deducted by the payer and remitted directly to the federal government. The amount of interest, dividends, rents, and royalties received by non-residents excludes the amount of this tax. The amount of the tax is therefore included in miscellaneous investment income and in the National Income of Canada.

## (v) Accrued net income of farm operators from farm production

The net income accruing to farm operators from farm production<sup>29</sup> includes the sales of farm products, plus the imputed value of farm output consumed by the farmer and his family, plus the value of the physical change in farm inventories, less farm operating expenses and capital consumption allowances on farm buildings (excluding residential dwellings). Farm production includes the sale of logs cut from forests on farm lots and income from fur farming. It excludes, however, other forms of income of farmers such as net rental or interest receipts and imputed net rent of owner-occupied houses. It also excludes transfer payments such as payments under the Prairie Farm Assistance Act since these are not in exchange for goods or services and are therefore excluded from National Income. Since the National Income attempts to measure earnings arising out of current production rather than cash receipts, the accrued earnings of farm operators arising out of the operations of the Canadian Wheat Board and the Canadian Co-operative Wheat Producers 30 are included as is the accrued

29. Excluded from this item are a small number of incorporated companies since their profits are included in the item corporation profits.

income represented by inventories held on the farm. The physical change in farm-held grain is valued for the National Accounts, from 1947 on, each quarter in terms of average quarterly prices. For a reconciliation with the "net income of farm operators from farming operations", see Table 52.

### (vi) Net income of non-farm unincorporated business

93. This item includes the net income of all other non-farm unincorporated business covering almost every industry in the economy including the net income of independent professional practitioners such as doctors, dentists, nurses, lawyers, and engineers.

### (e) Inventory Valuation Adjustment

- 94. In measuring National Income and Gross National Product certain valuation adjustments are necessary. It was explained above that output is measured at the current market prices of the period. Normal business accounting procedures that are used to record assets at "book value" may give different values so that for the National Accounts valuation adjustments must be made to adjust these book values to current market prices and thus remove from profits unrealized gains or losses that result from using book values. Certain of these valuation adjustments were described in the section devoted to the consumption of fixed capital.
- 95. A major example of a valuation adjustment is the inventory valuation adjustment. Any change in total output in current dollars from one accounting period to another should reflect a change in physical quantities produced valued at the average market prices of the period. Accordingly, the appropriate figure to include in Gross National Expenditure is the value of the physical change in inventories. Since inventories often contain goods produced in previous years, an adjustment of book values is necessary to allow for the valuation of the carryover portion. To make this adjustment it is necessary to make assumptions about the commodity content of inventory holdings, the normal turnover period for the industry, and the accounting methods used by the firms in arriving at book values. The book value of inventories is deflated to remove the effect of price changes and the derived "physical" change is then valued at average prices of the current period to obtain the value of the physical change. The inventory valuation adjustment is the difference between the value of the physical change and the change in book value. This adjustment is made to the National Income to remove from corporation profits and the net income of unincorporated business any unrealized gains or losses arising from the effect of price changes on holding of inventories. Since the method of calculating farm income automatically eliminates such gains or losses, this adjustment is required only for non-farm business inventories and grain in commercial channels other than the Canadian Wheat Board and the Canadian Co-operative Wheat Producers.

<sup>30.</sup> The Canadian Co-operative Wheat Producers Limited was established in 1924 as the central selling agency for the Alberta, Manitoba, and Saskatchewan Wheat Pools. It was replaced in 1935 by the Canadian and Saskatchewan Wheat Board, A difficult problem arises in valuing grain output at market prices during the period in which it is produced since all sales are made by the Canadian Wheat Board. The methods used in arriving at the accrued earnings of farm operators arising out of the operations of the Canadian Wheat Board, described in Section A of Part III, Sources and Methods, come as close as is statistically possible to arrive at accrued income which corresponds to production of the current period. In recent years the federal government has made payments to the Canadian Wheat Board to cover the storage costs on temporary wheat reserves. These payments are treated in the National Accounts as a federal government subsidy.

### Section C

## THE FRAMEWORK OF THE SECTOR ACCOUNTS

96. The previous section was devoted to an explanation of the principal measures of aggregate output and their components. Underlying the derivation of these totals is a set of transactions among various sectors of the economy. The purpose of this section is to develop an accounting framework depicting these transactions<sup>31</sup>.

#### **SECTORS**

97. A full set of National accounts must distinguish among various sectors of the economy and must account for various types of transactions among these sectors or transactors. Four broadly distinguishable classes of transactors can be identified whose economic motivations and behaviour are relatively homogeneous within groups, but essentially quite different between groups. These are persons, governments, businesses, and non-residents (rest of the world). Because these transacting groups behave in different ways, it is necessary to distinguish among them if light is to be shed on the structure and functioning of the economic mechanism. This principle of homogeneity of transacting groups from the standpoint of motivation and behaviour is a major basic idea behind the division of the economy into four sectors 32. The accounts thus represent consolidations of the accounts of individual transactors.

31. Systems of National Accounts similar to the set described in this section are presented in Richard Stone, "Functions and Criteria of a System of Social Accounting", in International Association for Research in Income and Wealth, Income and Wealth, Series I (Cambridge: Bowes & Bowes, 1951), pp. 1-74, especially pp. 50-54; Ingvar Ohlsson, On National Accounting (Stockholm: Konjunkturinstitutet, 1953), Ch. IV; D.K. Burdett, "Social Accounting in Relation to Economic Theory", Economic Journal, LXIV (Dec., 1954), 679-697; Morris A. Copeland, "The Feasibility of a Standard Comprehensive System of Social Accounts", in National Bureau of Economic Research, Conference on Research in Income and Wealth, Studies in Income and Wealth, Vol. XX (Princeton, Princeton University Press, 1957), pp. 19-95; and United Nations, A System of National Accounts and Supporting Tables (New York: United Nations, 1953).

32. A qualifying word needs to be said about the non-residents' sector. Here the principle of grouping together transactors in strict accordance to the similarity of their economic behaviour cannot be fully applied. This is because the transactors involved are in reality the business, personal, and government sectors of the domestic and international economies, and the motivation and behaviour of these sectors are different regardless of whether the transactions take place internally or with the rest of the world. Thus, while the Canadian treatment of setting up a separate sector to segregate transactions with non-residents meets the practical test of facilitating economic analysis, it represents a departure from the formal logic outlined above.

98. The four sectors are defined as follows:

Persons: The personal sector includes all persons and all private organizations which are not established for the purpose of making a gain, e.g. charitable institutions, municipal hospitals, and universities. Private pension funds are also included in this sector. (See also paragraphs 120-126.)

Governments: The government sector includes all general government departments and agencies—federal, provincial, and municipal—which are non-commercial in nature. Government enterprises which operate for a profit and are thus similar in their motivation to a private business enterprise are included in the business sector. Non-budgetary activities of governments which do not come within the definition of government business enterprise, such as transactions arising out of the unemployment insurance fund and the old age security fund, are included in the government sector. (See also paragraphs 136-139.)

Businesses: The business sector includes all transactors which operate for gain, including corporations, unincorporated business enterprises, independent professional practitioners, and government business enterprises. The basic characteristic is that these transactors produce goods and services for sale at a price which is intended to cover the cost of production. There are, however, a few special cases in which part of the activity of a transactor classified in another sector is considered to be business activity. Persons who own residential dwellings are assumed to be operating as a business enterprise in respect to their housing activity whether or not they occupy their own premises. Similarly, private non-commercial institutions are assumed to be operating as a business enterprise when they undertake the construction of new buildings. Thus, all non-government capital formation is defined to take place in the business sector. Government buildings upon which a rent is imputed are also classified in this sector in respect to imputed net rent and capital consumption allowances. Expenditure on new government buildings is however not classified as business fixed capital formation and is included in the government sector

Non-residents: The non-residents' sector includes the transactions with Canadians of all persons who are not normally resident in Canada and of all governments and business enterprises located outside of the geographical boundaries of Canada

### TRANSACTIONS

99. In general, a transaction is any dealing in which something is exchanged for money or a claim on money. Equivalents of such transactions where a medium of exchange is eliminated through a

barter transaction or an imputed transaction are also included as if a money transaction took place. Transactions may be classified into the following types:

- (i) transactions in which goods or services produced by industries or imported (i.e. excluding the services of the factors of production) are exchanged for money or claims on money,
- (ii) transactions in which the services of factors of production are paid for in money or claims on money,
- (iii) transactions in which financial claims (such as mortgages and bonds) are exchanged for money or claims on money.
- 100. In addition to these three types of bilateral transactions, a fourth type of transaction must be included:
  - (iv) transactions in which goods, services, money, or claims on money are given with none of these items being given in exchange. These are known as "transfer payments".
- 101. A distinct type of activity from the purchase or sale of goods and services is the actual using up in the accounting period of goods and services (raw materials, fuel, electricity, supplies, and services of business enterprises) in the production process to produce other goods and services. These flows into and out of the production process may be termed "technological input and output flows". Input flows will differ from purchases of materials if raw material inventories change and output flows will differ from sales by the change in goods in process or inventories of finished goods.
- 102. The timing of transactions may create a problem if not consistently handled. Entries in

business accounts may occur at two different times when a purchase of goods occurs: (i) when the goods are delivered (as an account payable) and (ii) when the goods are paid for (a deduction from cash). Moreover, there may be timing differences between these entries and parallel entries on the part of the seller, giving rise to statistical discrepancies. Theoretically, for the measurement of Gross National Product, transactions should be recorded at the point in time that they become an account payable or receivable, i.e. on an "accrual" rather than a "cash" basis. This is necessary if the objective is to produce from these Accounts a measure of the value of goods and services produced during a given period since production corresponds to accrual rather than cash accounting. In practice, however, statistics may not always be available on an accrual basis so that portions of some items, as is explained in Section A of Part III, Sources and Methods, may be on a cash basis. In the personal and government sector accounts, cash accounting is frequently considered to be more appropriate for analytical purposes than the accrual basis.

### ACCOUNTS

103. The transactions enumerated above can be organized into four accounts for each of the four sectors, each of the first three accounts corresponding to a grouping of the basic concepts of Section B — production; income and expenditure; saving and capital formation 33—and a fourth account for financial transactions related to the financing of these types of economic activity.

33. Inventories held by the manufacturer may be thought of as being sold to himself and thus included as a transaction.

Account	Type of activity	Type of transaction (excluding balancing item)	Balancing item (carried down into next account)
Production	Production	Technological input and output flows	Output minus input of intermediate goods and services = value added by the sector
Income and expenditure	Income distribution through payments to factors of production	Transaction type (ii)	
	Income redistribution by means of trans- fers (including direct taxes)	" (iv)	
	Expenditures by persons, governments, and non-residents	(i)	Income minus expenditure = saving of the sector
Saving	Capital formation and acquisition of existing real assets	" " (i)	Saving minus fixed capital formation minus value of the physical change in inventories minus net acquisition of existing real assets=net lending to or net borrowing from other sectors
Financial transactions	Transactions in financial claims, i.e. lending or borrowing	" (iii)	-

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#### OUTLINE OF COMPLETE SET OF NATIONAL ACCOUNTS

Sectors	PERSONAL S	SECTOR	GOVERNMENT	NT SECTOR	BUSINE	ESS SECTOR	NON-RESIDENT	rs' sector	TOT	ALS
Accounts	Dr.	Cr.	Dr.	Ct,	Dr.	Ct	Er.	Ct.	Dr	Ct
PRODUCTION ACCOUNT		9. Output of services produced		24. Output of services produced	32. Purchases of goods and services	42. Output of final goods and	4			Output of final goods and
(I) Output of final goods and services 1		by domestic servonts and private non-commercial institutions (Sa)		by government (20a)	from non-residents (58a)	services (a) sold to persons (5b) (b) sold to governments (20b) (c) business gross fixed capital formation (d) value of physical change in inventories (e) sold to non-residents (51) (f) less indirect taxes plus subsidies (27)				services at factor cost less imports of goods and services 4
(ii) Output and input of intermediate goods and services	1. Input of intermediate goods and services from business (43a)		16. Input of intermediate goods and services from business (43b)		33. Input of intermediate goods and services produced by business (43c)	43. Output of intermediate goods and services used (1) (a) by persons (16) (b) by governments (16) (c) by business (33)			Input of intermediate goods and services	Output of intermediate goods and services
(iii) Balance: Value added at factor cost	2. Value added at factor cost (10)		17. Value added at factor cost (25)		34. Value added at factor cost (44)				Gross domestic product at factor cost	
INCOME AND EXPENDITURE ACCOUNT		10. Value added=wages and salaries received by		25. Value added = wages and	•	44. Value added = incomes of factors of production				Gross domestic product at factor cost
(iv) Value added at factor cost		salaries received by domestic servants and em- ployees of private non- commercial institutions (2)		salaries received by government employees (27)		employed by business + capital consumption allowances (34)				e jactor tosi
(v) Payments to factors of production	3. Factor incomes paid to persons (11d)	1). Factor incomes received by persons from (a) governments (18) (b) business (35a) (c) non-residents (50) (d) persons (3)	persons (11a)	26. Profits of government business enterprises and other investment income from business sector (35b)	(a) to persons (11b) (b) to governments (26)		50. Factor incomes paid to Canadian residents (11c, 45)	54. Pactor incomes received from Canadian residents (35c)	National Income plus factor incomes paid to non-residents less undistributed profits	National Income plus factor incomes paid to non-residents less undistributed profits
(vi) Indirect taxes less subsidies				27. Indirect taxes less subsidies(42f)						Indirect taxes less subsidies
(vii) Transfers (including direct taxes)	4. Transfers to other sectors (a) direct taxes (b) other (28b, 46)	12. Transfers from (a) business (36b) (b) government (19a, 19b)	(a) interest on public	28. Transfers from other sectors (a) direct taxes (4m. 38a) (b) other (4b, 36b)	(a) direct taxes (28a) (b) other (12a, 28b)			55. Interest on public debt paid to non-residents (19a)	Transfers	= Transfers
(viii) Expenditure on final goods and services by persons and governments and exports and imports of goods and services!	5. Personal expenditure on consumer goods and services produced (8) by persons (9) (42a) (c) by observed (42a) (travel expenditure and personal remittances) (56b)		20. Government expenditure on goods and services produced (a) by government (24) (b) by business (42b)				51. Purchases of goods and services from Canadian business (42e)	56. (a) Goods and services sold to Canadian business (32) (b) Canadian travel expenditure abroad and pedisonal remittances (5c)		
(ix) Balance: Saving	6. Net saving <sup>2</sup> (13)		21. Surplus or deficit <sup>2</sup> (29)		37. Gross saving = undistributed profits + capital consumption allowances (47)			57. Surplus or deficit of Canada on current account with non- residents (52)	National saving	Surplus or deficit on current account with non-residents
SAVING ACCOUNT		13. Net saving (6)		29. Surplus or deficit (21)		47. Gross saving = undistributed	52. Surplus or deficit of Canada on		Surplus or deficit on current	National saving
(x) Saving						corporation profits + capital consumption allowances (37)	current account with non-		account with non-residents	
(xi) Business gross fixed capital formation <sup>3</sup>					38. Gross fixed capital formation (42c)				Business gross fixed capital formation	
(zii) Change in inventories					39. Value of the physical change in inventories (42d)				Value of physical change in inventories	
(xiii) Transaction in existing real assets	7. Purchase of existing real assets assets from other sectors (30, 48)	other sectors (22, 40)	22. Purchase of existing real assets from other sectors (14, 48)	30. Sale of existing real assets to other sectors (7, 40)	40. Purchase of existing real assets (14, 30)	48. Sale of existing real assets to other sectors			Purchases of existing real assets	Sales of existing real assets
(xiv) Balance: Net lending or net borrowing	8. Net lending or net borrowing (15)		23, Net lending or net borrowing (31)		41. Net lending or net borrowing (49)			58. Net borrowing or net lending (53)	Zero (Net lending = net borrourng 5)	
FINANCIAL TRANSACTIONS ACCOUNT (xv) Leading or borrowing		15. Net lending or net borrowing (8)		31. Net landing or net borrowing (23)		49. Net lending or net borrowing (41)	53. Net borrowing or net lending (58)			Zero (Net lending = net borrowing)

Notes: Hems in italics do not appear in the published National Accounts, Tables 7-18.

1. In lines (1) and (viii) exports and imports of goods and services exclude factor incomes received from or paid to non-residents and is line (viii) government expenditure excludes wages and salaries paid to government employees, which are shown in line (v).

2. No explait consumption allowances are changed by comment excludes a constant exclusion.

3. No explait consumption allowances are changed by comment sectors.

4. In totalling this line imports, which are a debt in the business sector, have been subtracted from the conditional control of the debt entries in Canadian sectors.

• This line does not add to any significant aggregate because direct payments of factor incomes are shown in line (v) (see note 1) and interest on the public debt paid to non-residents is in line (vi). If this were not so, line (viii) would add to Gross National Expenditure less business gross fixed capital formation and the value of the physical change in inventories.

104. Theoretically, each of these accounts could be constructed for each of the four sectors of the economy, yielding an interrelated system of sixteen accounts<sup>34</sup>. In practice, as will be explained later, this procedure is not carried out completely in the Canadian system. An outline of a complete system does provide, however, a useful way of describing the logic of the sector accounts and provides a basis for relating recent developments such as inter-industry flow tables and financial transactions accounts to the published sector accounts.

105. An outline of the Accounts appears in the accompanying scheme and a description of the main features follows with a detailed description of the actual Canadian National Accounts beginning in paragraph 116. This outline should not be interpreted as necessarily representing an ideal system but merely as an introduction to the present set of sector accounts shown in Tables 7-18 and to recent extensions of the accounting system. In this outline each group of transactions has been numbered. The number in parenthesis after a transaction group refers to the corresponding entry in the accounts of another sector or in another account of the same sector. In effect, therefore, a doubleentry set of accounts for the economy has been constructed in which each transaction is recorded twice. In some cases transactions with two or three sectors have been condensed into one entry; for example, "transfers to other sectors". In this case, three numbers appear in parenthesis after the transaction. In the outline, some transactions are printed in italics. This indicates that these items do not appear in the published set of National Accounts shown in Tables 7-18. In the case of items in the production, saving, and financial accounts, the reason is that the boundaries of the present system do not extend as far backwards or forwards as the boundaries of the complete system. As will be explained more fully later, the business income and expenditure account is replaced in the Canadian system by an investment income appropriation account. Certain items which would appear in the business income and expenditure account are therefore deleted and replaced in the actual Accounts by transactions showing the source and disposition of investment income. In the published Accounts certain transfers (e.g., transfers from persons to corporations) are statistically insignificant and do not appear. Since there are certain other minor differences in presentation it may be necessary to add together two items to obtain correspondence between items in the outline and published figures.

106. The production (or operating) account for a sector is a technological account which shows on the credit side the value of output of goods and

services produced by the sector. On the debit side is shown the input of intermediate goods and services used to produce the output. By intermediate services is meant services purchased from business enterprises such as advertising agencies, services of firms of consulting engineers, and so forth. Intermediate goods include the materials, fuel, electricity, office and process supplies, and other goods used in the production process.

107. In the business sector, the output of final goods and services includes sales to persons, sales to governments of capital goods or construction materials, sales of business to business of fixed plant, machinery and equipment, the value of the physical change in inventories, and sales to nonresidents - exports (except factor incomes received from non-residents). The output of intermediate goods and services represents output which has been used during the period for producing other goods and services by persons, governments, or business. On the debit side of the business sector production account is shown all imported goods and services (except travel expenditures and income paid to non-residents). It is assumed that all such imports pass through the business sector (which includes trade channels) before going to the final user. A second cost of production is the cost of intermediate goods and services used in the production process, all of which are assumed to be produced by the business sector. One component of the market value of output which is shown separately is indirect taxes less subsidies. These indirect taxes less subsidies are shown as a negative credit in the business sector production account and a credit in the government revenue account. The balance in the business sector production account is therefore the value added at factor cost by this sector. As was explained in paragraphs 53 and 72, value added at factor cost is equal to the incomes of the factors of production employed by the business sector plus capital consumption allowances 35. Further comment on the concept of value added at factor costs appears in paragraphs 183-186.

108. The production account for the personal sector is really a production account for private non-commercial institutions and for domestic servants. The output of these institutions and servants is valued at cost and the total value of output is shown as a credit in this account. All these services are consumed by the personal sector and so an amount equal to this output is shown as part of personal expenditure on consumer goods and services as a debit entry in the personal income and expenditure account. The cost of production of this output consists of the office and other

<sup>34.</sup> An alternative treatment of the non-residents' sector would be to regard transactions with this sector as belonging to the foreign trade accounts of each of the three domestic sectors — in other words, to have five types of accounts for each of the three domestic sectors.

<sup>35.</sup> If it is desired to have the residual equal net income originating in the sector, capital consumption allowances can be shown as a separate debit item and posted to the credit side of the business sector's saving account.

supplies used by the private non-commercial institutions plus the wages and salaries paid to their employees and the wages paid to domestic servants. These wages and salaries constitute the value added in production by the personal sector.

109. A similar concept of production applies to the government sector. Government for the purpose of a production account is considered to be a producer of services such as public administration, defence, education, and health. Again, these services are valued at cost and are shown as if they were purchased by governments. The total value of government output therefore appears as a credit entry in the government production account and as a debit entry in the government income and expenditure account<sup>36</sup>. Cost of production of government services consists of the various supplies purchased from business, plus the wages and salaries paid to government employees, and military pay and allowances. The last two items constitute the value added in production by the government sector.

110. The table of the inter-industry flow of goods and services referred to in a footnote to paragraph 56 is also a set of production accounts for the economy. Instead of dividing the economy into the sectors which are used in the sector accounts, the interindustry flow table classifies each unit of production (establishment) within the personal, government, and business sectors to the industry in which it is classified by the D.B.S., Standard Industrial Classification Manual (Ottawa, 1948). The principles of industrial classification are explained more fully in Section D. It should be noted at this point that the primary reason for introducing the production account into the description of the sector accounts is to show the relation between inter-industry flow tables and the sector accounts. The production account is normally omitted from a set of sector accounts since, as will be explained in Section D, industrial classification is more useful than sector classification for production studies.

111. In a complete scheme in which the production account is shown, the value added at factor cost, which is the balancing item in the production account, is carried down into the income and expenditure account as a credit entry. In the income and expenditure account the earnings of the factors of production are distributed to the sectors to which they accrue. In addition to the earnings of the factors of production, other forms of income must be taken into account to arrive at the income out of which the expenditure of a sector is made. The payments received by the factors of production may be transferred to other sectors by means of transfer payments, such as payments of direct taxes by persons to governments or payments of social insurance by governments to persons. In addition, the government obtains revenue from indirect taxes

 $36. \ \, \text{See} \,$  footnote to paragraph 138 for a different point of view on government production.

but this is partially offset by the payment of subsidies. Such transfers of current income are intersectoral redistributions of income already earned in the production process and cancel out when the accounts are consolidated over all sectors. Between sectors, however, they have important redistributive effects<sup>37</sup>. After allowing for these transfers, the allocation of the balance of income in the personal and government sectors between expenditure on goods and services and saving is shown. In the personal sector, saving is "net" since all capital consumption allowances are in the business sector. In the business sector, all expenditure on goods and services is on production account so that the income figure that remains after taking into account payments to the factors of production and transfer payments is the gross saving of the business sector. All capital consumption allowances are included in this residual saving and it is therefore said to be "gross". In the non-residents' income and expenditure account, the total debit entries (as viewed by non-residents) add up to the total exports of goods and services (adjusted to National Accounts concepts) from Canada. When imports of goods and services, which appear as credit entries, are subtracted from emports, the balance is the surplus or deficit of Canada on current account with nonresidents.

112. The saving of each sector is then carried into the saving account which shows the disposition of the saving of each sector. In addition to showing the composition of new capital formation which took place during the period in the business sector, this account also shows the transfers of existing real assets (including land) among sectors within the economy<sup>38</sup>. The balance in the business sector's saving account is the amount by which the total of business gross fixed capital formation, plus the value of the physical change in inventories, plus the net increase in the holding of existing real assets by the business sector (or minus the decrease), exceeded or fell short of the saving of the business sector. If this total exceeded business saving, the saving of other sectors must have made resources available for use by the business sector during the period. Since all capital formation is

<sup>37.</sup> International transfers of inheritances and migrants' funds are included in the financial account as capital transfers (see paragraph 50).

<sup>38.</sup> Business inventories are excluded from existing real assets in this context. Exports and imports of used machinery and equipment are included in the production and income and expenditure accounts in transactions in goods and services with non-residents. Purchases of used motor vehicles by persons from businesses are included in personal expenditure on goods and services while sales of motor vehicles by persons to businesses are deducted from this total. When a person buys land he is assumed to be acting in a business capacity and such a transaction would be treated as a purchase by business. Personal transactions in existing real assets which would be included in this item are restricted therefore to consumer durables, clothing, and similar items. Purchases of land by governments from the business sector would be a large component of government purchases of existing real assets.

defined to take place in the business sector, and since purchases and sales of existing real assets in the personal and government sectors may frequently cancel out, the net saving of persons and the government surplus may make available resources which can be used by the business sector. In addition resources may also be made available by non-residents when a surplus on current account occurs. On the other hand, personal saving may be negative or there may be a government deficit while in the business sector saving may exceed fixed capital formation, plus inventory change, plus the net acquisition of existing real assets. In this situation, the business sector may make resources available to other sectors where there is a deficit.

113. These transfers of resources from one sector to another take place mainly by means of the transfer of funds through financial intermediaries in the capital market. Thus, the fourth account, the financial transactions account, shows the transactions in financial claims by means of which funds borrowed to purchase goods and services are transferred from one sector to another. These transactions give rise to changes in financial assets such as bank deposits, mortgages, stocks and bonds, and so forth. A financial asset held by one sector is by its nature a liability of another sector. A purchase of a corporation bond from the issuing corporation by a person, for example, would increase the bond holdings of persons while increasing corporate liabilities. The payment for the bond would decrease personal bank deposits and increase those of the business sector. The net balance of these financial transactions is equal to the net borrowing or net lending of the sector. In the accompanying scheme only this balancing item is shown. In a completely articulated financial transactions account the transactions in the various types of financial assets giving rise to this net balance would be shown  $^{39}$ .

114. In summary, the production account brings together all technological input and output flows connected with the production of goods and services and shows the value added by each sector. The income and expenditure account shows the sources of income of the sector and the way in which the total of all elements of income at the disposal of a sector is distributed among expenditure, transfers to other sectors, and saving. The saving account shows the sources of national saving, its disposition, and the residual amount available for net lending or the net borrowing of the sector. The financial transactions account shows how changes in various types of financial assets and liabilities have accounted for the net lending or net borrowing of the sector.

115. If transactions are totalled across, aggregate totals for various types of activity are obtained. If value added in the production accounts of the three Canadian sectors is totalled (line iii), the total gross domestic product at factor cost is obtained. The total of line (ix) gives national saving. In some of the other lines total debits equal total credits so that transactions of these types cancel out for the economy as a whole. In the consolidation, all transactions in intermediate goods and services produced by the business sector (line ii), all transfers (line vii), all purchases and sales of existing real assets (line xiii), and all financial transactions implicit in line (xv) cancel out. It should be noted that these totals are not the same as those appearing in Tables 19 and 20. In the latter tables totals are taken by sectors, while the totals in the outline are for types of activity over all sectors.

the "investment transactions account" and conceptually a separate "financial transactions account" is distinguished. The last account shows changes in the stocks of various financial claims held by each sector, distinguishing nine groups of financial transactions: (i) currency and deposits, (ii) charge accounts and instalment credit, (iii) loans, (iv) claims on associated enterprises, (v) mortgages, (vi) bonds, (vii) stocks, (viii) insurance and pensions, and (ix) foreign inheritances and migrants' funds. For the investment transactions account and the financial transactions account, the business sector is sub-divided into unincorporated business, non-financial corporations, government non-financial business enterprises, banking, life insurance, and other financial institutions. The government sector is sub-divided into federal, provincial, and municipal sectors. The Accounts are being published as an appendix by L.M. Read, S.J. Handfield-Jones, and F.W. Emmerson, "National Transactions Accounts, 1946-1954" to Wm.C. Hood, Financing of Economic Activity in Canada (a study to be published for the Royal Commission on Canada's Economic Prospects by the Queen's Printer).

Financial transactions for the personal sector were presented in a paper by D.J.R. Humphreys, "Personal Saving in Canada: Direct Estimates 1939-1953", in American Statistical Association, Proceedings of the Business and Economics Statistics Section, 1954, pp. 207-214. Balance of payments statistics have long been a source of statistics on financial transactions with non-residents; see, for example, D.B.S., The Canadian Ralance of International Payments in the Post-War Years, 1946-1952 (Ottawa, 1953).

<sup>39.</sup> Typically in national accounting the saving and financial accounts have been consolidated into a "resting", "saving and investment", or "capital account". The financial transactions account has been separated from the saving account (which is a "real" account in that it includes only transaction in goods and services) by L.M. Read. See his article, "The Development of National Transactions Accounts: Canada's Version of or Substitute for Money Flows Accounts", Canadian Journal of Economics and Political Science, XXIII (Feb., 1957), 42-56. The concept of the financial account as an independent account has been mainly a result of the development of "moneyflows" or "flow-offunds" accounts. See Morris A. Copeland, A Study of Moneyflows in the United States (New York, 1952) and the Board of Governors of the Federal Reserve System, Flow of Funds in the United States, 1939-1953 (Washington, 1955). Read's approach has been to integrate transactions in goods and services within the existing National Accounting framework and develop a separate financial transactions account.

A set of financial transactions accounts for the years 1946-1954 have been constructed in a joint project undertaken by the research staff of the Royal Commission on Canada's Economic Prospects, the Research Department of the Bank of Canada, and the Research and Development Division of the Dominion Bureau of Statistics. In this presentation of a set of expanded National Accounts to include financial transactions, the production account does not appear, the income and expenditure account is called the "current transactions account", and the saving account is called

## THE SIX ACCOUNTS PUBLISHED IN CANADA

116. The diagram below portrays a complete system of sixteen accounts (represented by the small squares). The lines surrounding the saving and financial transactions accounts represent a consolidation of these two accounts over all four sectors into a single consolidated national saving account which is made in the Canadian National

Accounts. The production accounts for persons, governments, and non-residents are shown with dotted lines to indicate that these three accounts do not appear in the Canadian system. As was mentioned earlier, the analytical interest is in production accounts for industries (see Section D) not for sectors. The business income and expenditure account also does not appear in the Canadian system and is replaced by an investment income appropriation account.

	PERSONS	GOVERNMENTS	BUSINESS	NON-RESIDENTS
PRODUCTION				
INCOME AND EXPENDITURE				
SAVING				
FINANCIAL TRANSACTIONS				

- 117. The Canadian system of accounts thus consists of:
- (a) an income and expenditure account for the personal sector;
- (b) a revenue and expenditure account for the government sector;
- (c) a business operating account which is a production account in which all transactions in intermediate goods and services are cancelled out and in which the returns to the factors of production are explicitly shown. This account therefore shows some items which are shown in the business income and expenditure account in the system discussed in paragraphs 106-111.
- (d) a revenue and expenditure account for the nonresidents' sector;
- (e) an investment income appropriation account in which the investment income originating in the business and non-residents' sectors are brought together and then disbursed to the receiving sectors;
- (f) a consolidated national saving account for all sectors. Since net lending equals, net borrowing for the whole economy (including transactions with non-residents), all financial transactions cancel out in this consolidated account as do all transactions in existing real assets.

- 118. The omission of the production accounts for persons and governments does not affect the development of the personal and government income and expenditure accounts. Instead of value added being carried into this account from the production account, it is simply introduced directly as wages and salaries or military pay and allowances.
- 119. If the income and expenditure accounts are consolidated for the four sectors, then, in conjunction with the national saving account, Tables 1 and 2 can be derived. This is done in Tables 19 and 20. Thus, while Tables 1 and 2 are frequently thought of as independent tables, they may appropriately be considered as being derived from a consolidation of sets of transactions in goods and services among sectors.

## PERSONAL INCOME AND EXPENDITURE ACCOUNT

120. In addition to persons, the personal sector includes private non-commercial institutions and private pension funds. The treatment of insurance companies and similar institutions also requires explanation here.

### (a) Private Non-Commercial Institutions

- 121. Private non-commercial institutions defined as institutions whose service charges are not expected to cover expenses and which are not treated as part of the government sector, e.g., municipal, lay and religious hospitals; universities; labour unions; professional organizations; fraternal societies; and charitable institutions 40. The revenue of non-commercial institutions consists of fees; gifts from government, business and individuals; and investment income. The value of their services cannot be taken as equivalent to the fees received, as in the case of an ordinary business enterprise, since these do not usually cover expenses and, in fact, are not designed to do so. Nor is it logical to assume that the value of their services is equivalent to the total of fees and gifts received, since the amount of gifts does not correspond in any sense to services received by the donor or by the community as a whole.
- 122. The solution of measuring their contribution to national output is to regard private non-commercial institutions as "associations of individuals" who provide these services collectively to the community. The operating expenses of these institutions are then regarded as expenditure of the "association of individuals" and are included in personal expenditure on consumer goods and services. Wages and salaries paid to the employees of these institutions are included in the National Income. The investment income of these institutions

is regarded as if it accrues collectively to the association of individuals and is included with the investment income of persons. Thus, the saving of these institutions is consolidated with personal saving. Gifts from governments and from business are included with transfer payments to persons.

### (b) Insurance Companies

- 123. The cost of all types of insurance purchased by persons (life, accident, sickness, theft, personal property 41, casualty, and automobile) cannot be measured by simply taking the payments (premiums) for such insurance as equal to the price of these insurance services, since the premiums include moneys to be disbursed (claims) either in the same year or in future years to claimants. Since a portion of premiums and claims constitutes merely an intrasectoral redistribution of income, premiums and claims are ignored in the accounts. The cost of the service of the institutions which facilitate this process of redistribution is measured by their administrative expenses, i.e. premiums minus claims, which are included in personal expenditure on consumer goods and services.
- 124. Life insurance companies and fraternal societies have, however, an additional characteristic which must be considered in their treatment in the National Accounts. These institutions not only redistribute income of persons but also perform a saving function on behalf of persons. The personal savings accumulated in the life insurance group give rise to investment income which accrues on behalf of individuals. In order not to omit this investment income from personal income, life insurance companies are treated as "associations of individuals" in so far as their investment function is concerned and their investment income is included in "interest, dividends, and net rental income of persons". The administrative expenses of life insurance companies include the investment expenses of these companies, i.e., a "fee" which persons pay to the insurance companies for the management of their investments.
- 125. It should be noted, therefore, that the payment for the services of insurance companies constitutes the purchase of these services from the business sector and all factor incomes arising from this service activity originate in the business sector.

### (c) Private Pension Funds<sup>42</sup>

126. Wages and salaries paid to persons are calculated for the National Accounts before the deduction of employee contributions to such funds

<sup>40.</sup> As a result of statistical difficulties some of these institutions may be, at present, included in the business sector instead of in the personal sector on the income side of the Accounts.

<sup>41.</sup> It should be remembered that fire and other insurance on immovable property is bought by persons in their capacity as landlords, not as consumers, and is therefore treated as business expenditure, not personal expenditure.

<sup>42.</sup> Statistics on the financial operations of trusteed pension funds in Canada for 1952 and 1953 were published in D.B.S. Reference Paper No. 54, Survey of Canadian Trusteed Pension Funds, 1953 (Ottawa, 1955).

while the employers' contributions are included in supplementary labour income. The payments into private pension funds are, therefore, consolidated in the figure of personal saving. On the other hand, employer and employee contributions to social insurance and government pension funds are treated by the government as non-budgetary revenue. To be consistent with the treatment of these funds as non-budgetary revenue by the government, they are regarded in the National Accounts as part of the government surplus and not as personal saving (see item 1(d) of paragraph 130). Interest credited to persons on federal government annuities and the investment income on private pension funds are treated similarly to the investment income of life insurance companies and are included in personal income and therefore in personal saving.

## (d) Personal Income 43

127. Personal income measures all income received by Canadian residents and includes factor incomes of persons; transfer payments received by persons, such as family allowances and unemployment insurance benefits; and types of investment income, such as described above, accumulated on behalf of persons by life insurance companies, private pension funds, and similar institutions. It excludes incomes of the factors of production which are not paid out to persons, such as undistributed corporation profits and profits of government enterprises. In the case of farm operators and other unincorporated businesses, however, the whole net income is included in personal income since it is

43. Income size distributions of the cash income components of the income of non-farm families and unattached individuals have been prepared for the years 1951, 1954, and 1955 and published in D.B.S. Reference Paper No. 52, Distribution of Non-Farm Incomes in Canada by Size, 1951 (Ottawa, 1954); Reference Paper No. 66, Distribution of Non-Farm Incomes in Canada by Size, 1954 (Ottawa, 1956); and Reference Paper No. 80, Incomes, Liquid Assets, and Indebtedness of Non-Farm Families in Canada, 1955 (Ottawa, 1958). Reference Papers No. 52 and 66 also include size distributions of incomes of non-farming individuals.

These income size distributions exclude imputed income such as labour income received in kind, imputed net rents of owner-occupied houses, and imputed banking services to individuals. Also excluded are components of personal income which are not received during the year such as employer contributions to pension funds, the investment income of life insurance companies, and the investment income of industrial pension funds. On the other hand the size distributions include some income not in personal income such as annuity payments and retirement pensions. The size distributions include, as does personal income, the entire net income of unincorporated business, whether or not it is actually withdrawn from the business. See pages 36-37 of Reference Paper No. 66 for further comments on the relationship of the size distribution to personal income.

Reference Paper No. 80 also includes statistics on selected liquid assets and indebtedness items of non-farm families cross-classified by income levels.

A survey of research on income size distribution statistics in Canada to 1955 is given in Simon A. Goldberg and Jenny R. Pololuk, "Income Size Distribution Statistics and Research in Canada: A Survey and Some Analysis", in International Association for Research in Income and Wealth, Income and Wealth, Series VI (London, 1957), pp. 155-201.

not statistically feasible to separate withdrawals for personal use from amounts retained in the business 44.

128. The derivation of personal income from National Income is shown in Table 3, and in the personal income account, Table 7, the main components of personal income are shown<sup>45</sup>. It should be noted that the item "net income received by farm operators from farm production" differs from the accrued net income shown in Table 1 in that it excludes the adjustment which was made to take account of the accrued earnings of farm operators arising out of the operations of the Canadian Wheat Board and the Canadian Co-operative Wheat Producers.

129. It may be mentioned that in the sector accounts the cross-articulation of certain flows with other sectors necessitates an even finer breakdown of the main components of personal income than the analytical demands of the personal income and expenditure account as such would demand. Thus, in order to cross-articulate the item "wages, salaries, and supplementary labour income" with other sectors, it has to be broken down by originating sector, while expenditure on consumer goods and services has to be shown in such a way that the expenditures can be directly identified with the revenues of other sectors.

130. The definitions of the items comprising personal income follow:

- Item 1. (a) Includes wages, salaries, and supplementary labour income paid to residents of Canada (or those temporarily abroad) incorporated and unincorporated private businesses, independent professionals, and government business enterprises. Wages and salaries include payments in kind and bonuses and commissions and are reckoned before deduction of income taxes and employee contributions to pension and social insurance funds. Supplementary labour income consists of other employers' contributions that are regarded as payment for employees' services, e.g. employer contributions to pensions.
  - (b) Includes wages, salaries, and supplementary labour income paid by government agencies, other than government business enterprises. Wages and salaries

<sup>44.</sup> An inventory valuation adjustment should be made to personal income but it is not possible, as yet, to divide the total adjustment shown in Table 1 into the portion relating to corporation profits and the portion relating to unincorporated business incomes.

<sup>45.</sup> The item "net bad debt losses of corporations" is no longer included in personal income since it is not a true transfer payment. The transfer is not at the discretion of the transferor but the transferee. The item is considered to be much closer to a valuation adjustment like theft losses and therefore not part of personal income. The amount of bad debt allowances of corporations is shown in a footnote to Table 51.

- of certain non-commercial institutions, such as municipal hospitals and provincial universities, are excluded. Wages and salaries paid by government business enterprises are included under 1(a) and salaries and wages of non-commercial institutions under 1(c).
- (c) Includes wages of domestic servants and salaries paid by private non-commercial institutions. It includes wages and salaries of employees of certain non-commercial institutions under government supervision, namely municipal hospitals and provincial universities. See item 1(b).
- (d) Employer and employee contributions to social insurance and government pension funds are, as explained above, treated as government revenue. They are, therefore, deducted in this account. The outpayments of these funds, however, are revenue of persons in the year in which they are made and they appear under transfer income, item 6(a). Outpayments from private pension funds are interpersonal transfers which cancel out in this account.
- Item 2. In addition to cash payments this item includes estimates for food and clothing supplied in kind.
- Item 3. This item is calculated before income and excess profits taxes, and excludes earnings from sources other than the proprietor's business. It would be preferable to separate withdrawals for personal use from earnings retained in the business and to include only the former part here, but this is not statistically possible. The item excludes the "adjustment on grain transactions".

Item 4. See item 3.

- Item 5. This item includes the interest, dividends, and net rental income of persons from Canadian business and from non-residents; interest on the public debt received by persons; and the imputed net rent on owner-occupied dwellings. From 1950 on, corporations were allowed to capitalize that part of their earned surplus on which a fifteen per cent elective tax had been paid. Stock dividends issued against this surplus and estimated to have been redeemed by persons are included in personal income.
- Item 6. (a) Includes elements of personal income which are not earnings from the production of goods and services, e.g. family allowances, old age pensions, veterans' gratuities, grants to private non-commercial institutions, outpayments of social insurance and government pension funds. See also item 1(d).
  - (b) Charitable donations by corporations are treated as transfers from the business sector to the personal sector.

- (e) Personal Disposable Income and Personal Expenditure
- 131. If direct taxes (including income taxes and succession duties) paid by persons are deducted from personal income, the disposable income of persons is obtained (shown explicitly in Table 3). This represents the amount out of which personal expenditure on goods and services is made - the unconsumed residual being personal net saving. Personal saving is said to be net to indicate that it excludes the capital consumption allowances of unincorporated business which remain in the business sector. Personal income includes the net income of unincorporated business and therefore personal saving includes the change in the book value of the inventories of unincorporated business. Since farm inventories are sometimes large and change markedly from year to year, the amount of the change in farm inventories is shown in Table 3 so that personal net saving excluding the change in farm inventories can be derived.
- 132. The content of the items comprising the disposition of personal income is as follows:
- Item 8. (a) In addition to personal income taxes this item includes excess profits taxes paid by unincorporated businesses.
  - (b) Succession duties are normally considered a current receipt by government. If such duties are to be included in the government surplus, they must be deducted from personal income (i.e. treated as a current payment by persons rather than a capital transfer) in arriving at personal saving or a source of saving will be counted twice in the national saving account.
  - (c) Includes motor vehicle licences, radio licences, marriage licences, fines and penalties, etc., paid by persons.
- Item 9. In the sector analysis, personal expenditure on consumer goods and services must be broken down according to the sector from which the goods and services are purchased.
  - (a) This item includes all purchases by persons from Canadian business. It is derived residually by deducting purchases from persons (wages and salaries paid to domestic servants and employees of private non-commercial institutions) and purchases from non-residents (travel expenditure and other personal expenditure abroad) from total personal expenditure on consumer goods and services. Expenditures by persons on consumer durables such as automobiles and refrigerators are included but purchases of houses are excluded. From total personal expenditure has been deducted the value of used goods sold by persons to business and the value of trade-ins. Intra-personal transactions in used

- merchandise, including those effected through dealers in second-hand goods, are excluded.
- (b) See item 1(c).
- (c) The figures of "travel expenditures" as published in *The Canadian Balance of International Payments*, less an estimate of business expenditure contained in this item, are used to represent total personal expenditure abroad, exclusive of personal remittances abroad and expenditure by Canadian service men abroad. See also notes to 19(a) and 30.
- (d) Includes personal remittances abroad and expenditure by Canadian armed forces abroad.
- Item 10. This item is estimated residually by deducting from personal income the sum of personal direct taxes and personal expenditure on consumer goods and services. The figure includes the change in the book value of unincorporated business inventories as well as the refundable portion of income and personal excess profits taxes 46.
- 133. Table 47 shows the function or purpose of the various components of personal expenditure on consumer goods and services in current dollars and Table 48 gives a similar breakdown in constant (1949) dollars. Notes on the classification of the detail of the items appearing in Table 47 appear in Section D of Part III, Sources and Methods.

#### (f) Imputed Items Included in Personal Expenditure

134. A number of imputed items are included in personal expenditure on goods, and services (see Table 49). These imputed items are also included in the appropriate components of the Gross National Product in Table 1 as follows:

- (i) In wages salaries, and supplementary income: food issued to employees in lieu of or in addition to wages; lodging in houses, ships, hotels, etc., furnished in lieu of or in addition to wages.
- food issued to members of the armed forces in lieu of or in addition to pay and allowances; clothing issued to members of the armed forces in lieu of or in addition to pay and allowances.

(ii) in military pay and allowances:

(iii) in rent, interest, and miscellaneous investment income: imputed net rent on owner-occupied residential dwellings;

- estimated value of services rendered by banks and similar institutions to persons without specific charge, i.e. imputed bank interest.
- (iv) in accrued net income of farm operators from farm production: farm consumed farm produce; fuel wood cut and used on farms.
- (v) in capital consumption allowances: imputed capital consumption allowances for owner-occupied residential dwellings.

## (g) Geographical Distribution of Personal Income

135. Table 28 and Tables 31-35 contain distributions of personal income and its main components by provinces and for the territories. (As a result of statistical difficulties, figures for the Yukon and Northwest Territories are included with British Columbia prior to 1951.) The components are defined in the same manner as in Table 7; thus, the net income received by farm operators from farm production excludes the accrued earnings of farm operators arising out of the operations of the Canadian Wheat Board and the Canadian Cooperative Wheat Producers and is therefore different from the figure in Table 1. Distributions of some components - military pay and allowances, charitable contributions from corporations - are not published separately; thus, the components do not add to the total. Table 30 presents personal disposable income, i.e. personal income less direct taxes. In Table 29 personal income per person is obtained by dividing the personal income aggregate by the population of Canada as of June 1 (for intercensal years). See Table I of Appendix A of Part I for these population figures.

## GOVERNMENT REVENUE AND EXPENDITURE ACCOUNT

## (a) Government Non-Commercial Activities vs. Government Business Enterprises

which are included in the government sector may be regarded as a class of non-commercial institutions since the government sector includes all government activities except those performed by government business enterprises. The transactions of government business enterprises are regarded as being more similar in terms of motivation to the business sector of the economy than to the government sector and are therefore classified in the business sector. The distinction between government non-commercial and government business enterprise is not always clear-cut, but for the most part reasonable classification can be made on the basis of the following criteria:

- (i) Does the agency operate on a self-sustaining profit and loss basis by setting a price for its services which is calculated to cover cost?
- (ii) Does the agency maintain an independent accounting system which permits the charging of specific elements of cost against the revenue of the agency?

<sup>46.</sup> For further discussion of personal disposable income see Clarence L. Barber, "The Concept of Disposable Income", Canadian Journal of Economics and Political Science, XV (1949), 227-229, and the reply by Simon A. Goldberg, Ibid., 539-542.

137. All transactions of government business enterprises are consolidated with those of private business in the business operating account. Government business enterprises include agencies such as the Canadian National Railways, the Bank of Canada, Central Mortgage and Housing Corporation, the federal Post Office Department47, provincial liquor commissions, and municipal water works. The operation of government-owned buildings is treated as a business activity and is included in the business sector, the imputed net rent on these buildings being part of the profits of government business enterprises while the imputed capital consumption allowances are consolidated with other business capital consumption allowances. The construction of government buildings is, however, included in government gross fixed capital formation,

138. The government sector thus contains all general government departments and agencies including such agencies as the Canadian Broadcasting Corporation, municipal schools, and provincial and federal government hospitals. The services of these government departments and agencies cannot be measured by the selling price of the services since, in general, governments render services to the community without a specific charge being made. Moreover, taxes cannot be taken as a realistic approximation of the value of these services. The value of government services is therefore measured by the expenses incurred in rendering them. All the government expenditure incurred in the provision of services both to business and to persons for which no specific charge is made is included in Gross National Expenditure; the corresponding factor and other costs are included in the National Income and in other components of the Gross National Product 48. On the other hand, where specific fees charged for government services are already included in personal expenditure (for example, fees paid to government operated hospitals) or in the prices of goods and services sold by business (for example, grain inspection and weighting fees), these receipts are deducted from government expenditure on goods and services to avoid double counting.

### (b) Government Revenue

139. Table 9 shows the combined revenue of federal, provincial, and municipal governments. The tax revenue consists of direct taxes on persons; direct taxes on corporations; withholding taxes on interest, dividends, rents, and royalties paid to nonresidents by governments and business; and indirect taxes. Personal and corporation income taxes and the general manufacturers sales tax all include the two per cent old age security tax. Government investment income consists of interest, including intra-governmental interest payments, and profits of government business enterprises. These profits are transferred from the business sector in which government business enterprises are classified 49. Extra-budgetary items also appear as government revenue, such as employer and employee contributions to social insurance funds and government pension funds.

140. The item "direct taxes—corporations" is divided into two parts: (i) the amount actually collected during the period by the federal and provincial governments (including the two per cent old age security tax), and (ii) the difference between this amount and the accrued federal tax liabilities of corporations. At the provincial level, no adjustment to an accrual basis is made, it being assumed that there is a close correspondence between the collections and the accrual basis. A difficult problem in presentation of the sector accounts is created by fact that federal income tax collections and corporate liabilities may not correspond closely in amount. The business sector is

<sup>47.</sup> Post Office buildings are financed out of general government revenue and expenditure on Post Office buildings is therefore included in general government expenditure.

<sup>48.</sup> It has been argued that part of the government product should be treated as intermediate output supplied free of charge to the business sector and that the National Income should be reduced by the amount of government intermediate output. In defence it has been pointed out that goods and services provided without charge to business firms are not an element of cost to them and, under competitive conditions, are not, therefore, a component of the market value of business output. Unless some identity between business taxes and goods furnished to business by government is assumed, it cannot be contended that the provision of free government services to business constitutes duplication in business output. Because the factor costs incurred by government are not included in factor costs incurred by private business, factor costs incurred by government must be included to arrive at total National income unless vast segments of production and income recorded in the economic system are to be left out of the National Accounts because they do not constitute capital formation or the flow of final goods to individuals. Government purchases consist essentially of goods and services provided on behalf of the community as a whole, which it

has been found better to secure collectively instead or individually. They should therefore be included in a measure of the total goods and services produced to satisfy the needs of the members of the community. The problem of government services to business is really a problem of comparing situations over periods of time where the ratio of such services to the final output of business has changed rather than one of measuring shortrun changes in the level of output. For a further discussion see Simon Kuznets, "Discussion of the New Department of Commerce Income Series", Review of Economics and Statistics, XXX (Aug., 1948), 155-163, and the reply by Messrs. Gilbert, Jaszi, Denison, and Schwartz, Ibid., 179-193. This problem is also discussed in Ohlsson, op. cit., and by various other writers.

<sup>49.</sup> The undistributed earnings of the Canadian Wheat Board are, however, left in the business sector since they are part of the accrued net income of farmers.

The profits of provincial liquor commissions are included in the profits of government business enterprises. A part of these profits might be properly described as an indirect tax. If this were done the National Income would be lowered, but the Gross National Product at market prices would be unchanged. It would be both difficult and arbitrary to separate the profit element from the indirect tax element.

on an accrual basis; thus the accrued tax liability is a proper expenditure item to include in this account to arrive at business gross saving. On the other hand, taxes are a transfer payment and transfers are usually shown in the sector accounts on a cash basis. Moreover, the analysis of government accounts usually is made on a cash basis. The inclusion of the excess of tax liabilities over collections in government revenue means that this amount is included in the government surplus. In the short-run, the excess of tax liabilities over payments by corporations represents funds which the corporation may use for short-term purposes. In the analysis of corporate saving and capital formation, however, the accrual basis seems more appropriate. This breakdown of corporation direct taxes into these two components enables the analyst to rearrange the accounts in accordance with whichever treatment is preferred for a particular analysis.

- 141. Further explanations or cross references of the items contained in government revenue are as follows:
- Item 12. (a) See item 8(a).
  - (b) See item 8(b).
  - (c) See item 8(c).
- Item 13. (a) Includes corporate income and excess profits taxes on a cash basis. The refundable portion of the excess profits tax is excluded. Adjustments have been made for renegotiation of war contracts and conversion to a calendar year basis.
  - (b) This item is the excess of accrued tax liabilities over taxes actually paid to the government.
- Item 14. These are withholding taxes on interest, dividends, rents, and royalties paid to non-residents.
- Item 15. Indirect taxes represent a part of the market prices of goods and services which do not appear in factor costs. In contrast to direct taxes which are levied on net income, indirect taxes are deductible from gross revenue as business costs, e.g., real property taxes, excise and sales taxes.
- Item 16. (a) Includes interest on advances to public utilities and foreign governments and earnings of sinking funds and other public funds such as social insurance and pension funds. See also item 20(a).
  - (b) Includes net profits of government business enterprises such as Canadian National Railways, provincial public utilities, and the imputed net rent on government-owned buildings.

Item 17. See item 1(d).

142. Government revenues by level of government are contained in Table 36. More detail on direct taxes is in Tables 38 and 39, on indirect taxes in Table 40, on investment income in Table 41, and on employer and employee contributions to social insurance and government pension funds in Table 42.

### (c) Government Expenditure

- 143. Government expenditure, in addition to expenditure on goods and services, includes transfers of interest to other sectors (or back to itself), transfer payments such as family allowances and pensions to persons, and government subsidies on goods and services which are an offset to costs in the business sector.
- 144. The content of these items is as follows:
- Item 19. (a) This item embraces all purchases from Canadian business. It is derived residually by deducting purchases from the personal sector (wages and salaries and military pay) and the non-residents' sector (direct military expenditure abroad during the Second World War) from the total of government expenditure on goods and services. It may be noted that government purchases allowed for official travel, maintenance of embassies, etc., should be included with purchases from the non-resident sector. It was not feasible, however, to make this adjustment (which is known to be relatively small) and it is therefore included with purchases from Canadian business. Government expenditure for gifts abroad (mutual aid, UNRRA, and military relief) is included here.
  - (bi) See item 1(b).
  - (bii) See item 2.
    - (c) This item includes expenditure for the maintenance of Canadian armed forces abroad during the Second World War (exclusive of military pay and allowances which are included under 19(bii) above) and purchases of military equipment and facilities from other countries.
- Item 20. (a) This is interest on the public debt and it includes interest paid by government to government and it is necessary to deduct interest revenue item 16(a) to approximate the net transfer to the private sectors. See also note to item 16(a) above.
  - (b) See note to item 6(a).
- Item 21. Subsidies represent amounts contributed by government toward current costs of production. Accordingly, they are treated as offsets to indirect taxes collected by government (see item 29(b)).
- 145. Further detail on government expenditure by levels of government is in Table 37, on expenditure on goods and services in Table 43, on transfer payments in Table 44, on subsidies in Table 45, and on transfers to other levels of government in Table 46.
- 146. In Table 43 government gross fixed capital formation is shown in a footnote because the items that enter into it are contained in more than one of the items shown in the main table. When the government itself constructs a building or a portion of a

road, it hires workers to whom a wage is paid and it purchases building materials. The total cost of the item which enters into the capital formation figure is therefore the sum of wages and salaries paid to its own labour force by a government for doing the work plus the other goods and services purchased from the business sector. As explained in Section B, the net purchases by government commodity agencies (excluding government business enterprises) are not considered to be inventories for purposes of the National Accounts.

## (d) Surplus or Deficit

The residual obtained by subtracting government expenditure from government revenue is the government surplus or, if negative, the deficit (item 22). This is not the conventional budgetary deficit or surplus since government revenue and expenditure have been adjusted to conform with the basic definitions incorporated in the National Accounts. The budgetary accounting statements of fiscal year revenue and expenditure have been amended to exclude purely bookkeeping transactions as well as the purchase and sale of existing capital assets. Non-budgetary transactions such as employer and employee contributions to, and transfer payments from, unemployment insurance, workmen's compensation, and government pension funds, have been added, and for later years the figures are adjusted to a calendar year basis. Further, the surpluses or deficits of government enterprises are included.

148. Some of the more substantial adjustments to the federal accounts are as follows: elimination of reserve for possible losses on active assets, elimination of reserves for veterans' conditional benefits, elimination of expenditures charged with respect to the assumption of Newfoundland debt, elimination of expenditures charged with respect to shipment of Second World War military equipment to Europe under the North Atlantic Treaty, elimination of write-down of active assets to non-active account, allocation of war refunds to prior years, adjustment of corporate taxes to an accrual basis, elimination of sales of war assets, and exclusion of non-defence capital assistance allowances. Government loans or accumulation of gold or foreign exchange are not included with government expenditure. A reconciliation statement between the two sets of surplus or deficit figures is given in Table 53.

## **BUSINESS OPERATING ACCOUNT**

149. The business operating account summarizes the transactions of business enterprises. Purchases by one business from another are eliminated except for purchases for gross fixed capital formation and the value of the change in inventories. Broadly speaking, all economic units selling goods and services on a profit basis are included under the category of business — incorporated and unincorporated private business, farms, landlords, self-employed professionals, and government business

enterprises. As explained above, home-owners are regarded as landlords who rent to themselves and their landlord activity is therefore included in the business sector. Interest on mortgages on residential dwellings is therefore treated as investment income originating in the business sector. The business operating account includes only operating revenues and expenditures and, consequently, investment income received from the other sectors is shown in the investment income appropriation account. Receipts and outlays of private pension funds do not form part of the revenue of the business sector but are consolidated with the personal account.

### (a) Banks

150. One type of business which required special treatment is the banking industry, i.e. chartered banks, savings banks, and similar institutions. The usual way of measuring income originating in an industry is by adding together all payments made by the industry to the factors of production (wages, salaries, interest, rents, and profits before taxes) and subtracting interest received. The latter are subtracted in order to get a measure of net factor use, since these non-operating revenues are included in profits. It was noted, however, that when this procedure was applied to the banking industry the resulting figure of income originating was usually very small or negative. This fact suggested that the conventional procedure of estimating income originating in an industry is not applicable to institutions such as banks.

151. If some of the payments for factor use by an industry are made, not in the form of a money payment, but in the form of a service without specific charge, then the usual procedure of calculating income originating in the industry results in underestimation by an amount equal to the value of this service. Banks fall into this class of industry. Part of their disbursements of interest to depositors for use of "capital" is made in the form of services to depositors without specific charge, and this amount does not appear in the figure of income originating in banking unless specifically imputed. Accordingly, imputations have been made in order to account for the value of these services provided without specific charge to persons and governments, thus increasing the level of National Income by the amount of the imputation.

### (b) Business Operating Revenue

152. The items comprising business operating revenue are defined as follows:

Item 24. (a) See item 9(a).

- (b) See item 19(a).
- (c) All expenditure in Canada on new construction and new machinery and equipment, by private or government business enterprises and home owners, is included here. Government expenditure on roads, public buildings, and other

new durable assets (other than expenditure by government business enterprises) is not included here but appears in government expenditure on goods and services (item 19). An estimate of capital expenditure charged to current account is included with new construction, new machinery and equipment (see item 29(c)).

(d) The book value of inventories is deflated to remove the effect of price changes and the derived "physical" change is then valued at average prices of the current period to obtain the value of the physical change. The inventory valuation adjustment is the difference between the value of the physical change and the change in book value (see item 28f).

Item 25. (a) This is the item "travel expenditures" of non-residents in Canada as published in *The Canadian Balance of International Payments*.

(b) This item includes all other Canadian receipts on current international account except interest and dividends received from non-residents, inheritances and migrants' funds, and Mutual Aid to NATO Countries. The assumption is made that all exports of goods and services are made by business in order to avoid adjustments which are not of sufficient practical importance to warrant additional complication of the accounts. Interest and dividends received from non-residents are excluded because Tables 11 and 12 constitute an operating account; inheritances and migrants' funds are regarded in the National Accounts as transfers of capital; and Mutual Aid to NATO Countries is either included in government expenditure of goods and services or represents shipments of previously produced goods not forming part of Gross National Product.

## (c) Business Operating Expenditure

153. The items comprising business operating expenditure are defined as follows:

Item 28. (a) See item 1(a).

(b) This is the sum of corporation profits before taxes, and rent, interest, and miscellaneous investment income. Corporation profits are reckoned before deduction of income and excess profits taxes, depletion allowances, and charitable donations, and before payment of dividends to non-residents. The figures are adjusted for corporation losses and renegotiation of war contracts. The remainder of the item is obtained by adding together interest and net rents received by persons; interest paid to

non-residents; the withholding tax on interest, rents, and royalties; investment income of life insurance companies and similar bodies accruing on behalf of Canadian policy-holders; government interest revenue; and the trading profits of government business enterprises; and deducting all interest on government debt. Interest and dividends received from abroad are omitted. For reconciliation with the figures appearing in Table 1, see paragraphs 167-175.

(c) See item 3.

- (d) This adjustment takes account of the accrued earnings of farm operators arising out of the operations of the Canadian Co-operative Wheat Producers and the Canadian Wheat Board.
- (e) See item 4.
- (f) See item 24(d).

Item 29. (a) See item 15.

(b) See item 21.

- (c) Capital consumption allowances and miscellaneous valuation adjustments include depreciation allowances on business plant, equipment and machinery; on residential housing; on the assets of some types of private noncommercial institutions; and on government-owned buildings. With the exception of housing, depreciation is at present calculated on a book value basis. Also included are capital outlay charged to current expense; the claim portion of business and residential insurance; scrap, salvage, and certain trade-in allowances; amortization, development write-offs, deferred maintenance, and miscellaneous charges to reserves; and bad debt allowances. A negative component included is an adjustment for non-capital outlays charged to capital account.
- Item 30. This item includes all Canadian payments on current international account except for interest and dividends paid to non-residents, travel expenditure, expenditure by Canadian armed forces abroad, personal remittances abroad, government military expenditure abroad during the Second World War, inheritances and migrants' funds, and Mutual Aid to NATO Countries. See also item 19(a), re government expenditure abroad, and item 9(c), re personal expenditure abroad.
- 154. Table 51 shows the item capital consumption allowances and miscellaneous valuation adjustments according to the form of organization of the enterprise, i.e. corporations, individuals and unincorporated business, and government business enterprises. The latter includes the imputed capital consumption allowances on government-owned buildings.

## NON-RESIDENTS' REVENUE AND EXPENDITURE ACCOUNT

155. This is the account of non-residents with Canadians. The revenues of non-residents result from sales to Canadians (i.e. Canadian imports) while the expenditures of non-residents are purchases from Canadians (i.e. Canadian exports). In order to arrive at the National Accounts concept of goods and services, adjustments are made to the concepts of current receipts and current payments in The Canadian Balance of International Payments (see Table 55) to exclude inheritances and migrants' funds, since they are not related to the current earnings of Canadian factors of production. They are treated in the National Accounts as transfers of capital. A further adjustment is made to exclude Mutual Aid to NATO Countries since the amounts involved are either included in government expenditure or represent shipments of previously produced goods not forming part of Gross National Product.

156. If the total revenue of non-residents is subtracted from the total expenditure, the residual is the surplus or deficit of Canada on current account (on transactions relating to the National Accounts) with non-residents (item 36). If this item is positive, exports of goods and services by Canadians have exceeded imports by Canadians and a net amount of goods and services has been made available for the use of non-residents during the period. If imports have exceeded exports, Canadians have on balance received a net addition from non-residents to the available supply of goods and services.

157. Cross-references and explanations of other items in this account are:

Item 33. (a) Includes payment of interest and dividends after deduction of withholding taxes.

(b) See item 30.

Item 34. (a) See item 9(c).

(b) See item 9(d).

Item 35. (a) See item 19(c).

(b) This is interest on the public debt paid to non-residents.

Item 38. (a) Includes interest and dividends received by Canadian corporations from non-residents.

(b) See item 25(a).

(c) See item 25(b).

Item 39. Includes interest and dividends received by persons (including unincorporated business) and governments from non-residents.

# INVESTMENT INCOME APPROPRIATION ACCOUNT

158. This account shows the sources of all elements of investment income and the disposition of this income to other sectors or to the source of saving account. The reconciliation of the aggregates

in this account with investment income totals appearing elsewhere in the Accounts is explained in paragraphs 167-175.

159. Cross-references to the items follow:

Item 41. See item 28(b).

Item 42. See items 38(a) and 39.

Item 44. (a) See item 5.

(b) See item 6(b).

(c) See item 13(a).

(d) See item 13(b).

(e) See item 14.

(f) See item 16(b). (g) See item 16(a).

(h) Undistributed corporation profits.

Item 45. See item 20(a).

Item 46. (a) See item 33(a).

(b) See item 35(b).

### NATIONAL SAVING ACCOUNT

### (a) Sources of National Saving

160. In this account the total saving of Canadians is shown. Personal net saving is transferred from the personal income and expenditure account. Business gross saving consists of three components: (i) undistributed corporation profits (from the investment income appropriation account); (ii) capital consumption allowances of corporations, government business enterprises (including imputed capital consumption allowances on government buildings), unincorporated businesses, and imputed capital consumption allowances on owner-occupied residential dwellings - the total of which is transferred from the business operating account; and (iii) the adjustment on grain transactions to take account of the accrued earnings of farm operators arising out of the operations of the Canadian Wheat Board and the Canadian Co-operative Wheat Producers. To business gross saving and personal net saving (which implicitly includes the undistributed net income of unincorporated business) an adjustment is made to eliminate any unrealized gains or losses resulting from changes in prices of goods held in inventories - the inventory valuation adjustment. The final component of national saving is the government surplus 50.

161. National saving contains a substantial amount of saving of non-residents, for which adjustment has not been made for statistical reasons. It was pointed out in paragraph 57 that adjustment should be made to the Gross National Product for the retention in Canada of undistributed earnings accruing to non-residents and, on the other hand, the retention abroad of undistributed earnings accruing

<sup>50.</sup> The effect of imputing capital consumption allowances on government buildings is to reduce the government surplus by this amount and to increase business gross saving by the same amount. Total national saving is unchanged.

to Canadians. In addition, in comparing national saving with business gross fixed capital formation, adjustment should be made for the fact that some of the replacement of business fixed capital has been financed from capital consumption allowances on foreign-owned business capital equipment. National saving should be adjusted, therefore, for undistributed earnings and to exclude capital consumption allowances on foreign-owned assets. The amount subtracted from national saving should be added to the deficit or subtracted from the surplus on current account with non-residents shown in the disposition of saving account.

162. Cross-references to definitions are as follows:

Item 48. See item 10.

Item 49. (a) See item 44(h).

(b) See item 29(c).

(c) See item 28(d).

Item 50. See item 28(f).

Item 51. See item 22.

## (b) Disposition of National Saving

163. The domestic disposition of national saving consists of two items: (i) business gross fixed capital formation (item 54), (ii) the change in the physical value of inventories (item 55). See items 24(c) and 24(d).

164. When Canadians have a surplus on current account with non-residents (item 56), a portion of national saving has been made available for use in other countries. When Canadians have a deficit on current account, non-resident saving has made a net contribution to the resources available to Canadians.

165. To measure the extent to which foreign savings have directly financed capital formation in Canada, financial transactions must be taken into account<sup>51</sup>. Even when Canada has a surplus on current account, non-resident savings may have been channelled into Canada to finance capital formation while Canadian savings moved abroad in greater amount. While it would have been possible in this case for Canadians to finance their own capital formation, conditions in the capital market may have been such that Canadian funds were not channelled into the industries in which capital formation was occurring in Canada, or the capital formation itself may have originated with foreign entrepreneurs having resources available abroad. Canadian funds may have been loaned to foreign manufacturers, for example, while non-resident savings were used to finance capital formation in Canadian resource industries. To arrive at the foreign financing of Canadian fixed capital formation plus the change in inventories, to direct investment in Canada should be added the undistributed earnings on foreign direct investments, new issues of Canadian securities sold to non-residents, other

long-term financing, changes in accounts payable, and capital consumption allowances on foreign-owned capital equipment in Canada<sup>52</sup>.

166. For some analytical uses it may be desired to include the figure for government gross fixed capital formation (see line 4 of Table 2) in total capital formation. To do this throughout the sector accounts for the years 1949-1956, the following changes would have to be made. In Table 10, only government expenditure on current goods and services will appear (see line 3 of Table 2). In addition to the "surplus or deficit on transactions relating to the National Accounts", a second saving item will then appear in Table 10 which might be termed "saving offset by government capital formation". Both these items will then be posted to Table 17 as part of national saving. In Table 11, sales of business to governments will be replaced by two items: (i) sales to government of current goods and services and (ii) government gross fixed capital formation. The first component will be posted to the government expenditure table (Table 10) and the capital formation part to Table 18 as a disposition of saving. This procedure of treating all government capital formation as being produced by the business sector requires that wages and salaries paid by governments to their own employees for new construction work be transferred from the government expenditure table (Table 10) to the business operating account (Table 12). At present, an estimate of this amount is not published.

## CONCEPTS OF INVESTMENT INCOME FOR VARIOUS AGGREGATES

167. Since investment income, which originates in two sectors, and interest on the public debt, which originates in the government sector and is now treated entirely as a transfer payment, are paid to all sectors, the relations of various investment income totals appearing in the National Accounts are complicated, and it is felt that a general discussion of the types of problems involved, with a few specific examples, would be of help to those users who are making special analyses.

- 168. The major points to be considered in reconciling two totals are the following:
- (a) Reconciliations normally involve the transition from one sector to another and the basic problem is therefore to determine the sectors involved in the totals, i.e. whether an aggregate is on a national or a domestic basis.
- (b) Where corporation profits are separate from other investment income, duplication of sub-items must be avoided.
- (c) Interest on the public debt is treated as a transfer payment and must be excluded from most totals.

<sup>51.</sup> See D.B.S., The Canadian Balance of International Payments, 1956, (Ottawa, 1957), p. 32.

<sup>52.</sup> Under National Accounting definitions depletion charges are added back into corporation profits and so are included in undistributed profits (see paragraph 80). Under Balance of Payments definitions they are not and therefore a specific adjustment is made for depletion charges in the Balance of Payments calculations.

169. Table 19, "Sector Accounts Consolidation". is helpful for seeing the types of adjustment which must be made. It shows that the investment income originating in the four sectors of the economy is as follows: (a) Personal sector - none; (b) Business sector - investment income (consisting of corporation profits, excluding interest and dividends from non-residents and including dividends paid to nonresidents; and rent, interest, and miscellaneous investment income, excluding interest and dividends from non-residents and including interest paid to non-residents); (c) Government sector - none, since interest on the public debt is treated as a transfer payment and the imputed net rent on government buildings is treated as the income of government business enterprise and included in income originating in the business sector; and (d) Non-residents' sector - the net of interest and dividends received by Canadians from non-residents less interest and dividends paid to non-residents.

170. The non-residents' sector, in (d) above, can also be thought of as an adjusting entry. In paragraphs 33 and 57 the distinction between national and domestic production was explained. If a total is on a national basis, and it is desired to convert it to a domestic basis, interest and dividends received from non-residents must be added and interest and dividends paid to non-residents must be subtracted. The figures for the non-residents' sector in line 12 of Table 19 give this net adjustment. To convert Net National Income at factor cost and Gross National Product at market prices from a national to a domestic basis, line 12 is subtracted from the totals.

171. For convenience, the more important investment income aggregates are listed below with the notation as to whether they are on a national or domestic basis:

Table No.	Line No.	Item	Domestic or national basis
1	3	Corporation profits before taxes (excluding dividends paid to non-residents)	National
1	4	Rent, interest, and miscellaneous investment income (excluding interest paid to non-residents)	National
16	44(a)	Interest, dividends, and net rental income of persons	National
15	41	Investment income (excluding interest and dividends received from non-residents and including interest and dividends paid to non-residents)	Domestic
15	43	Investment income appropriation account: source	Mixed
16	47	Investment income appropriation account: disposition	Mixed
50	3	Corporation profits before taxes (including dividends paid to non-residents)	Mixed

172. In the investment income appropriation account receipts of interest and dividends from nonresidents are included on the source side and payments to non-residents are included on the disposition side. Moving line 42 (interest and dividends from non-residents) to the disposition side — and any transfer from one side of an account to the other side of the same account can only be accomplished by a change in the sign of the item — will make the disposition side equal to investment income on a domestic basis. Moving line 46 (interest and dividends paid to non-residents) to the source side will make the source side equal to investment income on a national basis.

Table No.	Line No.	Item	1950 (millions of dollars)
15	43	Total, investmentincome appropriation account	3,483
16	46	Less: Interest and dividends paid to non-residents	- 475
1	3+4	Equals: Corporation profits before taxes plus rent, interest, and miscellaneous investment income(national basis)	3,008

173. To obtain corporation profits before taxes on a domestic basis, from the figure on line 3 of Table 1, which is on a national basis, interest and dividends received by corporations from non-residents are subtracted and dividends paid to non-residents plus the withholding tax on dividends are added. On a national basis all withholding taxes are included in rent, interest, and miscellaneous investment income but on a domestic basis the withholding taxes on dividends paid to non-residents are included with corporation profits while the withholding taxes on interest, rents, and royalties are included with rent, interest, and miscellaneous investment income. All estimates in the sector accounts of interest and dividends paid to non-residents are exclusive of withholding taxes but the figures of dividends paid to non-residents, as presented in Table 50 "Analysis of Corporation Profits", include withholding taxes on dividends.

Table No.	Line No.	Item	1950 (millions of dollars)
1	3	Corporation profits before taxes (national basis)	2, 118
15	42(a)	Less: Interest and dividends re- ceived by corporations from non-residents	- 30
50	8	Plus: Dividends paid to non- residents and the withholding tax on dividends	404
		Equals: Corporation profits before taxes (domestic basis)	2,492

174. The item rent, interest and miscellaneous investment income in Table 1, line 4 (on a national basis) is obtained by adding together the investment income of government and persons and withholding taxes; and subtracting interest on the public debt, which is treated as a transfer payment and dividends paid to persons by Canadian corporations, which are included in corporation profits. The following statement of this derivation also provides the reconciliation between interest, dividends and net rental income of persons (Table 16, line 44(a)) and rent, interest, and miscellaneous investment income (Table 1, line 4).

Table No.	Line No.	Item	1950 (millions of dollars)
16	44(a)	Interest, dividends, and net rental income of persons	1,268
16	44(f)	Profits of government business enterprises	316
16	44(g)	Government interest revenue	155
16	<b>44</b> (e)	Withholding taxes on interest, dividends, rents, and royalties paid to non-residents	54
16	45	Less: Interest on the public debt	- 545
50	10	Less: Dividends paid to Canadian persons	- 358
1	4	Equals: Rent, interest, and miscellaneous investment income (national basis)	890

175. The conversion to a domestic basis is made by adding interest paid to non-residents and subtracting interest and dividends received from non-residents. Since withholding taxes on dividends are included in the total on a national basis, an indirect approach must be used. In the second line of the following statement dividends paid to non-residents (exclusive of withholding taxes) are added, while in the third line dividends paid to non-residents (inclusive of withholding taxes) are deducted. This has the net effect of removing withholding taxes on dividends.

	Line No.	Item	1950 (millions of dollars)
1	4	Rent, interest, and miscellane- ous investment income (na- tional basis)	890
16	46	Interest and dividends paid to non-residents by business and government excluding withholding taxes	475
50	8	Less: Dividends paid to non- residents, including with- holding tax on dividends	- 404
15	42(b)	Less: Interest and dividends received from non-residents by persons and governments	- 61
		Equals: Rent, interest, and miscellaneous investment income (domestic basis)	900

### Section D

# THE INDUSTRIAL DISTRIBUTION OF GROSS DOMESTIC PRODUCT AND OTHER AGGREGATES

## INDUSTRIAL DISTRIBUTION OF GROSS DOMESTIC PRODUCT AT FACTOR COST

176. In paragraphs 52-53 the general concept of value added was explained. Value added in the economy can be shown according to the contribution of each sector of the economy or according to each industry in the economy. The distribution according to sectors (persons, governments, and businesses) was explained in paragraphs 106-109. An alternative to a sector analysis of the economy is to use the D.B.S. Standard Industrial Classification Manual (Ottawa, 1948). In this classification establishments engaged in the production of goods and services are assigned to industry classes according to their principal product or activity. Industrial groupings do not depend upon whether an activity is carried on by a government agency or by a business enterprise, or whether for profit or on a non-profit basis. An industry is a group of establishments which have

sufficient common characteristics that they may be grouped together for analytical purposes <sup>53</sup>. They may, for example, manufacture products which are used for the same general purpose (the clothing industry) or they may all use the same principal component material (the wood products industry). It has been said, therefore, that "Industries as such have no identity. They are simply a classification of establishments] which may for the moment be convenient. A change of technique and of organization may require a new classification and a new industry" <sup>54</sup>. Generally, however, such changes occur slowly so that revisions to an industrial

<sup>53.</sup> See E.A.G. Robinson, The Structure of Competitive Industry (revised ed., Cambridge, 1935), pp. 6-13; Joan Robinson, "Imperfect Competition Revisited", Economic Journal, LXIII, (Sept., 1953), 579-81; and D.B.S. Standard Industrial Classification "Manual, p. 1-5.

<sup>54.</sup> É.A.G. Robinson, Competitive Industry, p. 13.

classification do not occur so frequently as to make the classification unsuitable for the analysis of industrial change.

177. If an establishment produces two products, for example, radios and bicycles, its classification depends on which of these two products contributes the greater proportion of the value added by the establishment<sup>55</sup>. If this were radios, all the output of the establishment would be classified to the electrical apparatus industry. If bicycles came to contribute the larger proportion of value added, the establishment would be reclassified to the transportation equipment industry.

178. In an industrial classification, a single industry group, such as the service industry group, may contain establishments which in the sector classification would be found in the business sector, or in the government sector, or in the personal sector. For example, in the industrial distribution a person who produces domestic services in or about a private household, for which he is paid, is considered to be employed by an establishment in the personal service industry. Such workers are included in the personal sector in the sector accounts. Municipal schools and federal and provincial hospitals, all of which are in the government sector, are in the community service industry in the industrial distribution. The service industry group also includes many establishments which are classified in the business sector, for example, theatres, physicians and other independent professional practitioners, barber shops, and hotels.

179. The public administration and defence industry56 contains only those government establishments for which there is no private counterpart or similar type of establishment in other industry groups. Thus it contains the Department of National Defence and other federal, provincial, and municipal government departments and agencies which are not primarily engaged in an activity classified in other industries. The public administration and defence industry excludes government establishments engaged in directly providing communication, health, and education services. It does, however, include departments concerned with the general administration of such services. According to the principles of the Standard Industrial Classification, provincial government establishments principally engaged in the maintenance of highways should be classified in the transportation industry and similarly some other government establishments should be classified in other industries. For the National Accounts it has not been feasible to make all these classification adjustments. In addition to those for communication, health, and education services, only a very few adjustments have been made and these latter adjustments change the value added in the industry by only a small amount. No establishments making trading profits are in the public administration and defence industry so that one industry in the Standard Industrial Classification — No. 914, Dominion Post Office — has been taken out of the public administration and defence group and placed in the communication group for this industrial distribution since the Post Office is classed as a government business enterprise in the sector accounts.

180. The problem of obtaining statistics on a suitable basis for industrial classification is a difficult one for the National Accounts. In order to obtain valid comparisons between the value added by various industries, the various components of value added must be classified on the same basis. Two bases of uniform classification are possible - the establishment and the enterprise (company)57. While statistics could be obtained for all components of value added from the enterprise, this unit of classification has the disadvantage for production studies that an enterprise may consist of a number of separate establishments engaged in different types of industrial activity. For example, one establishment within an enterprise may be engaged in the extraction of natural resources, another in their transformation into manufactured products, and a third in the distribution of these products (a manufacturer's sales branch). Thus, while the enterprise is the desirable unit for financial transactions such as those in the sector accounts of Section C, in so far as possible for production studies an attempt is made to divide such a multiple-unit enterprise into a number of separate statistical reporting units - establishments 58. To qualify as an establishment a unit must be able to report figures on the value of its output; its cost of materials, process supplies, fuel, and electricity; and its employment and payroll. It is not expected, however, that an establishment can report the overhead costs charged to it and, therefore, its profit. Thus, an establishment can supply statistics enabling the computation of the Census of Industry concept of value added by manufacture 59, but the income originating in the establishment cannot necessarily be computed from statistics reported by it if it is part of a multiple-establishment enterprise.

<sup>55.</sup> When it is not possible to calculate value added for each activity, gross value of production figures are used for classification purposes.

<sup>56.</sup> To avoid confusion with the government sector, the name "public administration and defence" is used instead of "government service".

<sup>57.</sup> The term enterprise is used to mean the business unit which files a separate taxation return with the Department of National Revenue and which is therefore tabulated separately in the industrial distribution of corporation profits and other items in that Department's publication, Taxation Statistics.

<sup>58.</sup> See United Nations, International Standards in Basic Industrial Statistics, Statistical Papers, Series M. no. 17, (New York, 1953); W.R. Simmons, "The Elements of an Industrial Classification Policy", Journal of the American Statistical Association, XLVIII (Sept., 1953), 429-439; D.B.S., Standard Industrial Classification Manual, p. 2; and Maxwell R. Conklin and Harold T. Goldstein, "Census Principles of Industry and Product Classification, Manufacturing Industries", in Conference of the Universities — National Bureau Committee for Economic Research, Rusiness Concentration and Price Policy (Princeton, 1955), pp. 15-36.

<sup>59.</sup> See footnote to paragraph 73.

Cross-Classification of Transactions of Selected Establishments in the Sector and Industrial Distributions

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		200		
Industry	ı		Business	ness
	Persons	Governments	Examples of government business enterprises	Examples of other business enterprises
1. Agriculture	ţ	I	Accrued earnings of farmers arising out of operations of Canadian Wheat Board	
2. Forestry		sates		
3. Fishing and trapping	ŀ	e e e e e e e e e e e e e e e e e e e		
4. Mining, quarrying, and oil wells	ŀ	1	Eldorado Mining and Refining Ltd.	
5. Manufacturing	1	-	Polymer Corporation Ltd.	
6. Construction		1		
7. Transportation	1	ı	Canadian National Railways National Harbours Board	
8. Storage				
9. Communication	ı	Canadian Broadcasting Corporation	Post office on current account	
10. Electric power, gas, and water utilities <sup>2</sup>	ı		Provincial power commissions, municipal water works	
11. Wholesale trade	ı	ı	Wages and salaries paid to employees of Canadian Wheat Board	
12. Retail trade	1	-	Provincial liquor commissions	
13. Finance, insurance, and real estate	1	1	Bank of Canada, Central Mortgage and Housing Corporation	Net rents and capital consumption allowances on dwellings and buildings owned by individuals and capital formation of residential dwellings
14. Public administration and defence	ı	General government departments and agencies not elsewhere classified	ſ	e e
15. Service	Wages and salaries paid to employees of private non-commercial institutions and to domestic servants	Municipal schools and federal and provincial hospitals	Imputed net rents and capital consumption allowances on government buildings	Capital formation of private non-commercial institutions
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Where only the name of an establishment is listed all its transactions are in one industry and one sector.

The "public utility operation" industry has been given the more descriptive name "electric power, gas, and water utilities".

means either no establishment in this sector is in this industry, or, in the case of the government sector, the value added by government set in this industry, as classified for the National Accounts, is small. Where no establishments in an industry are in the personal or government sectors, all establishments in the industry are in the business sector.

181. At present some of the items in the industrial distributions are on an establishment basis because this is the source of the statistics used in the calculation — wages, salaries, and supplementary labour income; and the inventory valuation adjustment. On the other hand, statistics based on the Department of National Revenue, Taxation Statistics, are on an enterprise basis — corporation profits, rent, interest, and miscellaneous investment income; net income of unincorporated business<sup>60</sup>; and capital consumption allowances and miscellaneous valuation adjustments. Further research is necessary to convert these items to a uniform basis of classification<sup>61</sup>

182. In so far as Canadian manufacturing enterprises are integrated backwards into resource industries or forward into wholesaling, retailing, finance, or other service industries, the statistics prepared on an enterprise basis in Tables 21,23 and 24 will show a larger proportion of productive resources engaged in manufacturing than would be shown if the profits and other investment income and capital consumption allowances of these multipleunit enterprises were divided into the portion relating to each establishment and each establishment classified separately. This vertical integration is particularly important between forestry and the wood and paper manufacturing industries, between metal mining and non-ferrous metal smelting and refining, between petroleum wells and petroleum refining, and between manufacturing and wholesale trade (manufacturers' sales branches)62. An establishment classification does not completely solve the problem of isolating manufacturing activity, although it significantly reduces its magnitude, since many establishments may engage, for example, in both manufacturing and trading activities. As the definition of an establishment indicates, however, it is not possible to collect comparable industry statistics from a finer unit of classification such as for each activity within an establishment.

183. The measure of value added chosen is gross domestic product at factor cost. Since the available capital consumption allowance estimates are in the main only book value figures, the gross measure of profits plus capital consumption allowances and other factor costs is more accurate than an attempt

60. A relatively small proportion of unincorporated businesses operate establishments in more than one division of industry.

to measure net income originating in an industry. Moreover, for some purposes, the gross figure may be a better indicator of the resources used in an industry.

184. When examining the value added by industries, what is being measured is production by industries located in Canada, not the contribution to production of factors of production resident in Canada. The distinction between a domestic concept and a national one is explained in paragraphs 33 and 57. while the derivation of the gross domestic product from gross national product figures is given in Table 4. Because of statistical difficulties, at the present time, the adjustment for factor incomes paid to and received from non-residents is made only for interest and dividends. Since a domestic concept is used for the industrial distribution, the total investment income in Table 23 does not agree with the total corporation profits before taxes plus rent, interest, and miscellaneous investment income in Table 1 since the statistics in Table 1 are on a national basis whereas Table 23 is on a domestic basis. Interest and dividends paid to non-residents are included in Table 23 but excluded from Table 1. Interest and dividends received from non-residents are excluded from Table 23 but included in Table 1.

185. Non-operating revenues (revenues not received for the production of goods and services) are not part of the value added by an industry and, therefore, interest and dividends received by an industry are excluded from the gross domestic product of an industry <sup>63</sup>. Interest received is therefore deducted from interest paid (dividends from Canadian corporations are already excluded from profits) and only the net interest (paid less received) is included in Table 23.

186. When considering the contributions to the gross domestic product of different industries, output should be valued at factor cost rather than at market prices <sup>64</sup>. A particular industry is concerned with the relation between selling value, excluding excise taxes, duties and other indirect taxes on the product, of its products to the cost of materials and services used in production, including taxes on these inputs. The difference, which is the value added by the industry, represents the industry's relative contribution to total output <sup>65</sup>. The relative share of an industry is therefore calculated at factor cost even though the total output of the economy — the Gross National Product — is measured at market prices.

<sup>61.</sup> An experimental distribution for the year 1949 of gross domestic product at factor cost and at market prices for forty-two industry groups with all components on an establishment (or, in some cases, an activity basis) has been published in D.B.S. Reference Paper No. 72, The Inter-Industry Flow of Goods and Services, Canada, 1949 (Ottawa: Queen's Printer, 1956). This distribution of gross domestic product at factor cost for 1949 provided, after some classification adjustments were made, the weighting system for the indexes of real output referred to in the footnote to paragraph 73.

<sup>62.</sup> Finance companies are usually separately incorporated because of the regulations imposed upon them and are not therefore included with manufacturing enterprises.

<sup>63.</sup> For a discussion of the definition of value added by the banking industry see paragraphs 150-151.

<sup>64.</sup> See J.L. Nicholson, "National Income at Factor Cost or Market Price?" Economic Journal, LXV (June, 1955), 221.

<sup>65.</sup> For some purposes it may be appropriate to regard taxes on real estate and natural resources as a "rent" for the use of land or other resources. By the exclusion of such taxes from a factor cost measure, an industry's use of productive resources may be understated.

187. When using the industrial distribution of gross domestic product at factor cost as an indicator of the relative quantities of factors of production employed in different industries, the relation between payments to factors and their contribution to output must be kept in mind. In equilibrium in a competitive economy, the addition to the value of output a factor could contribute would tend to be the same in each of its different employments. In turn, the price paid for the use of a factor would tend to equal the additional value of output that would be contributed by that factor. Thus, factor costs would represent the contribution to the value of output contributed by those factors and a change in factor costs, other things being equal, would represent a change in the value of output as a result of additional units of factors of production being employed. To the extent that competition is imperfect, the relation between factor costs and the value of output is distorted so that changing factor costs may only represent a change in the degree of competition in the product or factor markets of an industry.

188. The industrial distribution of net rents included in Table 23 is shown as income originating in the industry which owns the property, i.e. rent is treated as operating revenue. Owners (including owner-occupants) of residential buildings are included in the finance, insurance, and real estate industry. The imputed net rent and capital consumption allowances on government-owned buildings should be distributed for the industrial classification according to the industry in which the establishment is classified. Statistically this is not feasible and the entire amount is included in the service industry group since a large portion of it refers to municipal schools and federal and provincial hospitals 66,

189. Capital consumption allowances are included in the industry in which the building or equipment is used to produce goods and services. Thus, capital consumption allowances on a retail store which is owned by a finance company would be shown as gross domestic product originating in retail trade, while the paid net rent is income originating in the finance industry. In the factor cost distribution, property taxes do not appear at all.

190. The entire accrued net income of farm operators from farm production is included in agriculture, including the undistributed earnings of

farmers arising out of the operations of the Canadian Wheat Board and the Canadian Cooperative Wheat Producers. The wages and salaries paid by these Boards to their employees are included in wholesale trade.

### BUSINESS GROSS FIXED CAPITAL FORMATION, BY INDUSTRY

191. Table 25 shows a distribution of business gross fixed capital formation according to the industrial classification of the establishment making the capital expenditure. This table excludes government gross fixed capital formation. An industrial distribution of total fixed capital formation of businesses and governments is published in Table 1 of Department of Trade and Commerce, Private and Public Investment in Canada, Outlook 1958, and prior publications in this series.

## VALUE OF PHYSICAL CHANGE IN INVENTORIES, BY INDUSTRY

192. Table 26 shows a distribution of the value of the physical change in inventories according to the industrial classification of the establishments owning the stocks of goods.

### CORPORATION PROFITS BEFORE TAXES, BY INDUSTRY

193. An analysis of corporation profits is contained in Table 50. This Table begins with the figure appearing in Table 1, which is on a national output basis and therefore excludes dividends paid abroad. To arrive at total corporation profits, dividends paid abroad must be added back. The figure shown in line 3 of Table 50 is the appropriate total for calculating the ratio of tax liabilities or taxes paid to total profits. A breakdown of total corporation direct taxes into federal and provincial and by type is contained in Table 39.

194. In Table 27, corporation profits before taxes and including dividends paid abroad (line 3 of Table 50) are shown by industry. Since this concept of profits includes interest and dividends received from abroad it is not on a domestic basis and therefore Table 27 is not a component of Table 21, "Gross Domestic Product at Factor Cost, by Industry."

<sup>66.</sup> The imputed net rent and capital consumption allowances on owner-occupied dwellings and on government-owned buildings are shown in Table 49.

# PART III SOURCES AND METHODS

#### Section A

# COMPONENTS OF GROSS NATIONAL PRODUCT AND GROSS NATIONAL EXPENDITURE

201. This section describes the statistical sources on which Canada's National Accounts draw, and procedures used in making the required estimates. It aims primarily to give the users of the data a general view of the content of the various aggregates, and background to appraise the reliability of the estimates.

202. Although the nature of the components of Gross National Product and Gross National Ex-

penditure has already been briefly outlined in Part II of this publication, the following description of sources and methods will be introduced by a short discussion of the contents of each component. An attempt is made throughout to provide summary descriptions of the main procedures used before moving on to the more detailed and technical review of the sources and methods.

#### GROSS NATIONAL PRODUCT AT MARKET PRICES

#### Wages, Salaries, and Supplementary Labour Income

203. The estimates of wages, salaries, and supplementary labour income are prepared in the Labour and Prices Division of the Dominion Bureau of Statistics. The outline of methods and sources which follows is based on unpublished reference material prepared in that division.

204. Estimates of labour income are designed to include all compensation to Canadian wage-earners and salaried employees. They do not include the earnings of self-employed individuals or partners, the income of independent professionals, the net income of farmers, or payments to members of the armed forces. Wages and salaries, including income in kind (i.e. board and lodging), are estimated on a "gross" basis, that is, they are reckoned before tax deductions, contributions of employees to unemployment insurance, pensions and other social security schemes. Bonuses, commissions, and retroactive wage increases are included in the year in which they are paid.

**205.** Supplementary labour income consists of other expenditures by employers on labour account that can be regarded as payment for employees' services. Included here are employers' contributions to pension funds, employee welfare funds, unemployment insurance, and workmen's compensation <sup>67</sup>.

206. The general method of estimation consists in calculating the payments made on labour account by the various industrial groups, and summing the results. In recent years, by far the greater portion of the estimate is based on census of industry tabulations of aggregate payrolls, annual surveys, and the published statements of governments and business. However, in areas where such coverage is in-

complete, as in the case of industrial groups consisting mainly of small establishments, the problems of estimation are more difficult, and greater reliance must be placed on directly related data. Where this occurs, use is made of interpolation techniques based on benchmark material from the decennial censuses of population, agriculture and distribution, and indexes of aggregate earnings, employment, and wage rates. Wage rate indexes are obtained from the Department of Labour. In a number of cases, methods of estimation have had to be devised from indirect evidence, but such instances are few and, in the aggregate, quite small.

207. A qualitative analysis of the figures reveals that in the year 1955, approximately 75 per cent of the total labour income estimate was taken directly from annual surveys and published estimates, 23 per cent was projected on directly related data, and 2 per cent only was estimated indirectly. However, for the earlier years the proportion which rests upon direct annual surveys is smaller. For projection purposes, more adequate time series are available for the later years, particularly after 1941 when monthly indexes of aggregate earnings became available as a result of continuing surveys of larger establishments in the major non-agricultural industries. Consequently, a lesser degree of reliability attaches to the estimates for the earlier years.

# (a) Industries Covered by Census of Industry, Annual Surveys, or Published Statements

208. As pointed out above, the great bulk of the wage and salary estimates is taken directly from census of industry tabulations of aggregate payrolls, annual surveys, and the published statements of governments and business.

209. In forestry, wages and salaries paid by the larger establishments are reported annually. An allowance is made to include those establishments which do not report to the Bureau, based on the

<sup>67.</sup> Excludes that portion of employers' contributions estimated to be for medical aid and hospitalization, which is not regarded as a form of employee income.

ratio of estimated total production to the value of production reported by the sample of establishments. Total production is estimated by the Forestry Section of the Bureau.

- 210. Estimates of wages and salaries in mining are based on aggregate payrolls as reported in the annual census of industry. These figures are adjusted to exclude earnings in the metal smelting and refining industries, which are covered in manufacturing. An estimate of salaries paid to head office employees, based on data available annually since 1946, is added, as well as wages and salaries in contract drilling and in exploration.
- 211. In manufacturing, coverage through census of industry surveys is comprehensive and only minor adjustments have to be made to the data. Thus, working proprietors' withdrawals, which are included in the tables published by the Industry and Merchandising Division of the Bureau, are deducted, since they properly belong with net income of unincorporated business. Wages and salaries of head office personnel, not adequately covered by the census of industry until 1949, are estimated on the basis of a special survey and added. An estimate for repair establishments not covered by the census of industry is also added, while wages and salaries paid out by gas manufacturing establishments are deducted since they are classified with public utilities. Wages and salaries paid to the employees of manufacturing establishments for putting new construction into place are covered here.
- 212. Since 1952, the estimates of wages and salaries in construction are based on the annual publication, Construction in Canada (General Assignments Division). The gross value of construction performed by contractors is adjusted to exclude the value of work done by own account proprietors, and the wages and salaries content of the adjusted value of construction is then assumed to be in the same ratio as for large contractors for whom this information is available from an unpublished sample survey. The resulting estimate of wages and salaries is then further adjusted to remove wages and salaries covered elsewhere such as wages and salaries in contract drilling (mining); and an estimate of wages and salaries of employees of residential owner builders is also added.
- 213. In transportation, the greater part of the estimate, for the more recent years, is again based on annual surveys conducted by the Bureau. These surveys cover trucks and buses since 1941, water transportation since 1954, oil pipelines since 1948, air transport since 1938, and steam and street railways for the whole period. Estimated tips in dining, buffet, parlour and sleeping cars are incorporated. Trucks and buses are projected to years prior to 1941 on a combined index of truck drivers' wage rates and employment in trucking. Air transport is projected to years prior to 1938 on an index based on number of hours flown by commercial aircraft.

- Water transport for the more remote period and taxi service, which are estimated by projection techniques, are described in a later section.
- 214. In communication, the estimates are derived as follows: wages and salaries paid in the telephone industry are based on annual surveys by the Bureau. Wages and salaries of post office employees are derived from the Public Accounts of the federal government. In radio broadcasting a 1954 benchmark is computed from the monthly payroll returns to the Labour and Prices Division of the Bureau; prior estimates are made on the basis of indexes applied to benchmark material from the decennial census; these estimates are discussed below.
- 215. In the storage industry, annual survey data are available for warehousing for the years after 1944. For prior years these estimates are projected on related series. The estimate for grain elevators is obtained by projection from census benchmark data, and is discussed in a later section.
- 216. In public utility operation, wages and salaries paid in the light and power industry are taken from annual surveys, including payments to own employees for new construction work performed. Wages and salaries paid in gas manufacturing establishments are based on census of industry returns. The estimate of wages and salaries in waterworks from 1942 forward is based on sample surveys conducted by the Public Finance and Transportation Division of the Bureau. For earlier years, the estimates are carried back on the basis of the trend of total municipal wages and salaries, adjusted for the change between the 1931 and 1941 decennial censuses.
- 217. In finance, insurance and real estate, annual expenditures on wages and salaries by chartered banks are obtained from the Canadian Bankers' Association. Wages and salaries of other banking institutions are obtained either by correspondence or from other sections of the Bureau. For trust, loan, mortgage and insurance institutions, wages and salary payments are derived from the annual reports of the Superintendent of Insurance for Canada and of provincial registrars of loan and trust companies. In the miscellaneous finance group, special estimates had to be devised and these are described later.
- 218. In the service group, wages and salaries paid by the federal and provincial governments, including the sessional indemnities of the members of the federal and provincial legislatures, are derived from the Public Accounts, and since 1952, from the monthly returns on employment and payrolls to the Public Finance and Transportation Division. Tuberculosis sanatoria and provincial mental hospitals supported from budgetary appropriations of governments, which are derived from the same sources, are included here. Wages and salaries paid in post office employment are not included here since they are classified with communication. The bulk of the wages and salaries

received by the Canadian employees of foreign governments is based on information received from the United States defence forces in Newfoundland.

- 219. Wages and salaries paid by municipal governments, excluding municipal school corporations, are obtained from an annual sample survey conducted by the Public Finance and Transportation Division of the Bureau for the years from 1942 forward. The estimates for the earlier years are made by projecting census benchmarks on the trend of municipal expenditures. The figures include wages and salaries for fire and police protection and other municipal service except public utilities.
- **220.** Totals of teachers' salaries in municipally-operated schools are obtained from the reports of the provincial governments. In addition to teachers' salaries, estimates are included for administrative and caretakers' service and school transportation. These figures are provided by the Education Division of the Bureau.
- 221. The estimates of non-government services are computed mainly by interpolation or projection, utilizing directly related data, and in some cases indirect evider.ce; the methods are described below:
- (b) Industries Estimated on the Basis of Related Data
- 222. Wages and salaries in agriculture are estimated in the Agriculture Division of the Bureau. Since 1951, the estimates are constructed by projecting a benchmark estimate of wages, obtained from the 1951 agriculture census, on information collected annually in the December survey of crops and livestock. For the period 1926-1951 benchmarks obtained from the 1931, 1941 and 1951 censuses are interpolated on a combined index of hired labour force and farm wage rates.
- 223. In fishing, the estimates are based on earnings reported in the population censuses of 1931 and 1941 and on the returns to the census of fisheries taken in conjunction with the 1951 decennial census. The estimates of wages and salaries for other years are based on the trend of the "total value of fish caught and landed" as reported to the Bureau.
- 224. In hunting and trapping, the total wages and salaries obtained from the 1941 and 1951 censuses are projected on an index of the value of "wild life" fur production as reported to the Bureau.
- 225. The estimates of wages and salaries in construction for the earlier period are computed as follows. The 1946 figure of aggregate payrolls, as reported by the annual census of construction, is adjusted to exclude remuneration of non-wage-earners in the construction industry. This estimate is then blown up by the ratio of the labour force survey count of paid workers in private construction to the census of construction figure of employment, similarly adjusted to exclude non-wage-earners in

private construction. Similar benchmarks are computed for 1941 and 1951, using decennial census material and census of construction data for those years. The series of contractors' wages and salaries from the annual census of construction is used to interpolate between 1946 and 1951 and between 1941 and 1946, and backwards from 1941 to 1936. The series is then carried back to 1926 by means of an index of wages and salaries in private construction obtained from the Report of the Royal Commission on Dominion-Provincial Relations (to be referred to hereafter as the Rowell-Sirois Commission).

- 226. The estimates for water transport are based on population census benchmarks of earnings for 1941 and for 1951, and inter-benchmark estimates have been interpolated on the basis of water transportation payroll indexes. For years prior to 1941, an index of aggregate payrolls is constructed by combining an index of wage rates in water transport with an index of employment in shipping and stevedoring.
- 227. Wages and salaries paid in taxi service (transportation) are estimated by projecting census data on indexes based on the number of registered taxis in Canada and wage rate indexes for the period 1926-1941; on indexes combining the registration of passenger cars and average weekly earnings in truck transportation for the years 1941-1951; and on payrolls in transportation, communication and storage for the years since 1951.
- 228. As noted above, a special procedure is devised to estimate wages and salaries in radio broadcasting (communication) for the earlier period. Total wages and salaries in the broadcasting industry for the years 1941 and 1951 are obtained from the decennial censuses. A similar figure is obtained for 1931 by applying average earnings of radio station operators to estimated total employment in private broadcasting. Between 1941 and 1951 and 1951 and 1954, estimates are interpolated on the total wages and salaries of the Canadian Broadcasting Corporation, while an index of numbers of private receiving station licenses is used from 1926 to 1941.
- 229. Wages and salaries in grain elevators (storage) are obtained, prior to 1941, by projecting aggregate payrolls from the merchandising and services census of 1941 on the basis of a combined index of employment and wage rates in grain elevators. The index of payrolls in grain elevators is used to interpolate between the 1941 and 1951 benchmarks from the census of distribution, and also for subsequent projection.
- 230. In wholesale trade, benchmarks of total wages and salaries are established from the 1930, 1941 and 1951 censuses of distribution. Between 1941 and 1951 and from 1951 forward, the total is projected on the index of payrolls in wholesale trade, issued by the Labour and Prices Division, while the index of wholesale sales is used to project the series from 1930 to 1940. For prior years a special

index is constructed by combining employment in wholesale trade with the general average index of wage rates. An almost identical method is used to estimate the wages and salaries paid in **retail trade**.

- 231. In miscellaneous finance, estimates of wages and salaries are established from the decennial censuses of 1931, 1941 and 1951. Between 1941 and 1951 and from 1951 forward the benchmark is projected on the official index of aggregate payrolls in finance. For prior years an interpolating index is constructed by combining the index of employment in eight leading industries, the general average index of wage rates, and an index of the net income of stock brokers.
- 232. As noted above, estimates of wages and salaries in non-government service are based mainly on interpolation and projection. An exception occurs in the case of universities and private schools, whose estimates are based on reports submitted to the Bureau.
- 233. The field of health service is divided, for recent years, into wages and salaries paid in hospitals and wages and salaries paid outside of hospitals. Wages and salaries paid by public general hospitals are obtained, since 1942, from financial statements reported to the Bureau. From 1942 to 1950, when payroll data began to be reported, the estimates of wages and salaries paid in non-government chronic hospitals are based on totals of employed personnel multiplied by average earnings recorded in general hospitals. Wages and salaries paid in private hospitals and non-government tuberculosis sanatoria, up to 1945, when payroll data became available, are also estimated by this method.
- 234. Wages and salaries paid to employees in health service outside of hospitals are estimated for the period 1941-1951 by interpolation and after 1951 by projection on a series of net income of doctors and dentists. For the earlier years, the 1941 census estimate of wages and salaries in all health service (both inside and outside hospitals) is projected on the basis of specially-constructed indexes, using general employment indexes combined with general average wage rate indexes and a series of net income of doctors.
- 235. Estimates for wages and salaries in legal service are calculated, for the period 1926-1941 by projecting benchmarks obtained from the population censuses of 1931 and 1941 on an index of net income of lawyers. The interpolation between the 1941 and 1951 benchmarks is made on an index based on estimates of number of practising lawyers and average weekly earnings in finance.
- 236. A similar procedure is employed to estimate domestic service, the earlier years being projected on a combined index of employment in hotels and restaurants and wage rates in laundries and, for the more recent period, on a combined index of the numbers of female domestic servants and average earn-

ings in hotels and restaurants. In hotels and restaurants, the interpolation between 1941 and 1951 benchmarks is made on an index of aggregate payrolls in this service group; for the earlier years a special index is constructed using employment data, census data and the index of wage rates in laundries. Estimated tips are included.

237. Wages and salaries paid in laundries, cleaning and dyeing establishments are estimated as follows: benchmarks from the 1930, 1941 and 1951 censuses are extrapolated on an index of annual wages and salaries in power laundries, cleaning and dyeing plants as tabulated in annual Bureau reports; for the period 1926-1930, projection is based on an index combining employment and wage rates.

#### (c) Estimates Based on Indirect Evidence

- 238. In a number of cases, estimates of wages and salaries in the non-government service group are based on scanty information. Included here are wages and salaries paid in religious service, which are calculated from census material and projected to other years on an index combining numbers employed and an estimated series of free food and lodging provided.
- 239. The estimates of other professional service, including applied science, journalism, accounting, art and music are based on benchmarks obtained from the 1931, 1941 and 1951 population censuses, interpolated on a combined index of net income of doctors, general employment and general average wage rates from 1926 to 1941. Between 1941 and 1951, the interpolation is based on the payroll index for service, and after 1951, the projection is made with a combined index of paid workers in service and the consumer price index. In recreation service, the estimates of wages and salaries since 1930 are based on decennial census material projected on an index of wages and salaries in motion picture theatres; for earlier years, a combined index of wage rates and employment is used. Similarly, for business service the recent estimates are projected on an index of total payrolls in advertising agencies; for earlier years, an index of net value of production in Canada is used. Barbering, hairdressing, undertaking and other personal service are also estimated indirectly on the basis of indexes of employment and payrolls in associated industrial groups; and estimated tips for barbering and hairdressing are added.
- 240. The value of board and lodging received by employees is estimated separately for industries where they are important. In agriculture, census data are interpolated for intermediate years on an index of changes in employment and farm living costs. In forestry, totals of income in kind are estimated, since 1944, on the basis of annual surveys; the 1944 benchmark is projected to other years on the basis of an index combining food prices and employment in logging. In other groups, such as water

transport, hospitals, religious institutions and domestic service similar techniques are employed. Income in kind consumed by farm proprietors is included with accrued net income of farm operators from farm production. Food and clothing supplied to the armed forces are included under military pay and allowances.

#### (d) Supplementary Labour Income

241. Employers' contributions to pensions, social insurance and welfare funds on behalf of employees are also estimated separately by industry. The estimates in manufacturing, electric power, trade, mining and telephone are based on a survey made in 1944 and projected to other years on the trend of total wages and salaries of each industry. The Taxation Statistics (Department of National Revenue) figures for pension contributions are used since 1946, and for group insurance contributions since 1954. In steam railways, insurance, banking and federal and provincial governments, the estimates of employer contributions are made available through correspondence, by annual surveys, or from the publications of the agencies concerned. For municipal government, estimates are derived, for the years 1938-1944, from an analysis of the financial statements of a number of larger cities; the estimates for earlier years are based on extrapolation. Since 1945, the estimates are based on questionnaires collected by the Bureau in the years 1945 and 1946 covering 28 municipalities, and on projections on the returns from 21 municipalities in 1949. It should be noted that pensions paid by employers who have no funds set aside for this purpose and to which employees do not contribute, are also included as supplementary labour income.

242. Employer contributions to unemployment insurance are obtained from data supplied by the Unemployment Insurance Commission. Employer contributions to workmen's compensation funds are obtained from the reports of the Workmen's Compensation Boards in each province. An adjustment is made in the latter case to exclude a portion of employer contributions to workmen's compensation which is estimated to be for medical aid and hospitalization; this portion is not regarded as a form of employee income.

#### Military Pay and Allowances

243. Payments to members of the armed forces in Canada and overseas are treated as compensation for services rendered. Under this heading are included military pay, dependents' and subsistence allowances, clothing allowances, and the rehabilitation grant, i.e. the thirty days' extra pay and one month's extra dependents' allowance upon discharge. The rehabilitation grant is analogous to the discharge pay granted by some firms. War service gratuities and all post-discharge re-establishment benefits are excluded as transfer payments. The estimated value of food and clothing issues in kind are included.

244. The estimates of cash pay and allowances for the years 1938-1956 are on a calendar year basis and are supplied by the Department of National Defence. The estimates for the years 1926-1937 are by fiscal year ending nearest December 31 of the calendar year, and are taken from the Public Accounts of the federal government.

245. Income in kind is calculated by applying average military strengths of the three armed services to estimates of man-year costs for food and clothing.

#### Corporate Profits Before Taxes

246. The basic sources for the estimates of corporation profits are the compilations made by the Department of National Revenue from annual corporate tax returns. From 1944 on, the consolidations of corporate profit and loss statements are published in *Taxation Statistics*. Previous to 1944, the data are taken from the special corporation sample study (see paragraphs 525-538).

247. Adjustments are made to the figures reported to the Department of National Revenue in order to bring them into line with the definitions required for the National Accounts. Depletion, which reflects the exhaustion of natural resources, is not regarded as a charge against National Income, and therefore is included in profits. Charitable contributions made by corporations are added on the grounds that they are not a direct cost of production, but a distribution of earnings. Provincial mining and logging taxes, which are considered direct taxes, but are deducted in calculating profits reported to the Department of National Revenue, are included. Provisions for losses and additions to inner reserves by the chartered banks are added after an allowance based on past loss experience is made for bad debt losses. According to the income tax regulations, non-Canadian, non-life insurance companies are not required to report their interest income, and this must be included by a special adjustment.

248. Theoretically, profits relating to foreignowned assets in Canada should be deducted from Department of National Revenue figures for National Accounts purposes, since they do not represent the earnings of Canadian factors of production. In practice, however, for foreign-owned companies operating in Canada, it has been found impossible to allocate profits between Canadians and foreign shareholders so that only dividends and profits remitted to non-residents are deducted. Corporate losses are also deducted in order to bring the figures to a net basis, and an adjustment is made to eliminate profits which have been refunded to the government through re-negotiation of war contracts. It should be noted that taxation profits do not include the receipt of Canadian inter-corporate dividends and therefore no adjustment is needed.

249. In summary, then, corporation profits for the National Accounts consist of profits as reported to the Department of National Revenue, plus depletion

charges, charitable contributions, interest income of non-Canadian, non-life insurance companies, provincial mining and logging taxes, and additions to inner reserves of the chartered banks, less dividends and profits remitted to non-residents.

- 250. The series on depletion charges and charitable contributions are adjusted for under coverage, since certain firms are excluded in the detailed tabulations of income and charges by the Department of National Revenue. The adjustment is made by industry on the ratio of total profits and total losses of all companies to profits and losses of fully tabulated companies. In addition, adjustments are made to convert all series to a calendar year basis, since corporations are tabulated in Taxation Statistics on a taxation year basis - i.e. the data for each company are included in the calendar year in which its fiscal year ends. It is possible to estimate profits on a calendar year basis by assuming that all charges and income occur evenly through the fiscal vear.
- 251. Except for the series noted below, the source for the above data from 1944 on is *Taxation Statistics*. For the years 1926-1944, net profits and depletion charges are obtained from the sample corporation study. The method of estimation of the sample figures produces totals on a calendar year basis and no further adjustment is therefore necessary for the series obtained from this source. Charitable contributions made by corporations were not recorded in this study and are projected on the trend of corporation profits.
- 252. Figures of provincial taxes on mining and logging were compiled from the provincial Public Accounts. Interest received by non-Canadian, non-life insurance companies is obtained from the reports of the Superintendent of Insurance for Canada. Provisions for losses and additions to inner reserves by the chartered banks are taken from the Statistical Summary published by the Bank of Canada and from figures supplied by the Bank of Canada.
- 253. Estimates of profits refunded to the government on re-negotiation of war contracts are supplied by the Department of National Revenue. Dividends and profits remitted to non-residents are supplied by the Balance of Payments Section of the Dominion Bureau of Statistics.

#### Rent, Interest, and Miscellaneous Investment Income

- 254. This component is made up of the following items:
  - (a) Interest, rent, and miscellaneous investment income of persons
  - (b) Government investment income
  - (c) Adjustments for interest on public debt, the transfer portion of interest on consumer debt, and withholding taxes.
- 255. The methods employed in estimating rent, interest, and miscellaneous investment income are

to a large extent governed by the nature of the available statistics; four main classes of estimates may be distinguished. First, consolidation of individual accounts; second, projection of benchmark data; third, estimates obtained by residual methods such as the synthetic operating account (gross payments less receipts); and fourth, estimates obtained indirectly on the basis of ratios. The use of these methods is brought out more fully in the following sections.

- (a) Interest, Rent and Miscellaneous Investment Income of Persons
  - (i) Canadian bond, mortgage, and deposit interest
- 256. Canadian bond interest received by persons is obtained residually by taking total bond interest paid and deducting from this the interest received by government, business, and non-residents. The residual is interest received by Canadian persons (defined to include individuals, private non-commercial institutions, estates and trust funds). Data on bond interest paid and received are obtained from Taxation Statistics, the Public Accounts, the Bank of Canada, the reports of the Superintendent of Insurance and reports of crown corporations. The non-resident figures are furnished by the Balance of Payments Section of the Bureau.
- 257. Mortgage interest (including interest on agreements of sale) accruing to persons is among the least satisfactory estimates included in investment income. However, the amount involved is relatively small.
- 258. The method of estimation is to divide the field into two segments farm and non-farm to estimate the total individual holdings in each segment, and to apply an average rate of interest to the latter.
- 259. The figures of total farm mortgages outstanding and total farm mortgage interest paid are obtained from the Agriculture Division of the Bureau. The farm mortgage holdings of persons are obtained by deducting the holdings of business and government agencies from the total of farm mortgages outstanding. The interest on farm mortgages held by persons is obtained by applying the ratio of personal to total farm-mortgage holdings to total interest paid in farm mortgages.
- 260. Mortgage interest received by persons on non-farm mortgages is estimated by applying an estimated average rate of interest calculated by Central Mortgage and Housing Corporation (from reports of twelve leading life insurance companies) to personal holdings of non-farm mortgages. Personal holdings of non-farm mortgages are assumed to be an arbitrary percentage of mortgage holdings by business and government.
- 261. The estimate of business and government holdings of farm and non-farm mortgages is derived mainly from the following sources: Mortgage Lending

in Canada, a Factual Summary (Central Mortgage and Housing Corporation); federal and provincial Public Accounts; The Canada Year Book; reports of the Superintendent of Insurance for Canada, the Registrar of Loan Corporations for the Province of Ontario, the Canadian Farm Loan Board, Central Mortgage and Housing Corporation; and from correspondence.

- 262. The estimates of bank deposit interest received by persons are prepared in the Bank of Canada. From 1943 forward, interest on deposits paid to persons by chartered banks is calculated by subtracting from total deposit interest, as reported annually to the Minister of Finance, interest paid to non-residents and to Canadian corporations. Estimates for the period prior to 1943 are obtained by projection on the basis of changes in interest rates and Canadian interest-bearing deposits.
- 263. Deposit interest paid by loan and trust companies is estimated from annual reports of the Superintendent of Insurance and the Registrar of Loan Corporations of Ontario, and from financial statements filed with the Treasurer of the Province of Quebec. The figures are adjusted to include deposit interest of savings banks.
- **264.** Interest received from credit unions is estinated from the publication of the Department of Agriculture, *Credit Unions in Canada*. A rate of interest is applied to the figures for shares and deposits.
- **265.** Financial institutions, such as chartered banks, credit unions, trust companies, etc., render services to their depositors for which no specific charge is made, and therefore an imputed value for these services is added.

#### (ii) Net Rents Received by, or Accruing to, Persons

- **266.** Rental figures appear on both the income and expenditure sides of the National Accounts. On the income side, net rental income of persons and unincorporated businesses is included in investment income; net rental income of corporations is implicitly included in their profits; and expense components of gross rents are included implicitly in the other components of Gross National Product. On the expenditure side, the outlays on residential rents appear in personal expenditure on consumer goods and services. The rent expenses of business on non-residential property are reflected in the price of products sold by business.
- 267. In making the estimates the rental field is divided into three parts; residential non-farm rents, non-residential non-farm rents, and residential and non-residential farm rents. Of these three classes the first is the most important in size and is also the one for which statistical coverage is the most satisfactory. From 1941 on, the series on residential non-farm rents is estimated as outlined in the following paragraphs. Prior to 1941, the basic approach is similar but due to lack of data is not carried out at the same level of detail.

- 268. Residential non-farm rents (including garages) are divided into rents paid on tenant-occupied dwellings and rents imputed on owner-occupied dwellings.
- **269.** The method used in both cases is similar and can be outlined as follows:

Gross paid rents

Less: Expenses of facilities supplied by landlords and included in paid rent.

Equals: Gross space rent paid by tenant occupants.

Plus: Gross space rent imputed to owneroccupants.

Equals: Gross paid and imputed rent for space.

Less: Landlord's expenses on tenant and owner-occupied dwellings on:

Repair and maintenance Municipal property taxes Depreciation

Fire insurance Mortgage interest

Real estate commissions on transfers of existing dwellings.

Equals: Net paid and imputed rents.

Less: Net rents paid to non-personal sectors. Equals: Net rent paid and imputed, received by individuals.

- 270. Gross paid rent is obtained by multiplying the number of tenant-occupied non-farm dwellings by the average annual rent paid. The number of non-farm occupied dwellings classified between tenant and owner-occupied is estimated by Central Mortgage and Housing Corporation.
- 271. The average annual rent paid by tenants from 1941 to 1948 is obtained by projecting the 1941 census figure of rent on the trend of the rent component of the cost of living index. From 1949 on, average annual paid rents are obtained from a survey conducted monthly by the Dominion Bureau of Statistics.
- 272. Costs of facilities provided by the landlord to the tenant and included in the rent are subtracted from the gross rent paid, to obtain the gross rents paid for space. Space rent is defined here as rental for the use of land and dwellings and fixtures which are structurally part of the dwelling.
- 273. These facility expenses include the amortization of furniture, stoves, refrigerators and washing machines; and cost of fuel, janitor services, water, electricity, gas and hot water supplied by the landlord. These estimates are based on a survey of landlord expenses conducted by the Bureau in 1955, and are projected rather arbitrarily to other years.
- 274. Imputed gross space rents are obtained by multiplying the number of owner-occupied dwellings by the average annual gross imputed rent. The average gross imputed rent is equal to the average gross paid space rent adjusted for differences in the

amount of space between owned and rented accommodations. No allowance is made for the difference in quality between owner and tenant-occupied dwellings.

- 275. Landlord's costs of repairs and maintenance, property taxes, fire insurance, mortgage interest, real estate transfer costs on existing dwellings and depreciation expenses are deducted from both paid and imputed gross rents to arrive at net rents. Most of these expenses are allocated between owned and rented dwellings on the ratio of gross paid space rents to gross imputed rents.
- 276. Repair and maintenance figures are obtained from CMHC. Municipal property taxes on residential and non-residential property are supplied by the Bank of Canada, and these are adjusted to exclude taxes on non-residential property. Fire insurance premiums on residential non-farm dwellings are obtained from the reports of the Superintendent of Insurance for Canada. Mortgage interest paid is obtained by taking the total value of residential nonfarm mortgages outstanding and multiplying this value by the average mortgage interest rate as reported by the twelve leading life insurance companies. Both these series are obtained from CMHC.
- 277. Real estate commissions on the transfer of existing houses (see paragraph 66) are arbitrary estimates based on the annual income of real estate agents. Depreciation on residential dwellings is obtained from CMHC and is on a replacement cost basis.
- 278. Total net paid and imputed rents estimated as described in the preceding paragraphs are reduced by the amount of net rents flowing to the non-personal sectors in order to arrive at net paid and imputed rents received by individuals. Residential non-farm rent received by the non-personal sectors is based on the reports of CMHC and on rents received by corporations as published in *Taxation Statistics*.
- 279. Non-residential non-farm rents 68 received by persons are estimated as follows: first, an estimate is made of gross rents paid by business. Data on rents paid by corporations (exclusive of banks and insurance companies) are available from 1944 on from Taxation Statistics, and for the years 1926-1943 from the special corporation sample study. Rents paid by insurance companies are compiled from the annual reports of the Superintendent of Insurance; and rents paid by federal and provincial governments from the various Public Accounts.
- 280. Rents paid by unincorporated business are estimated on the basis of incomplete information. From 1944 forward, rents paid by unincorporated retail stores are based on surveys made by the Merchandising and Services Section of the Bureau.

Benchmarks available from the 1931 and 1941 censuses are projected to other years on the trend of rents paid by corporate retail stores. For the other groups, the benchmarks of rents paid are available from special compilations derived from the census of industry, or from special surveys such as those on accountants and insurance agents. In several industries, projections are made on the basis of rents paid by incorporated firms.

- 281. From the total of rents paid, as enumerated above, rents received by government agencies and incorporated business are subtracted to arrive at gross rents received by individuals. Gross rents received by governments are based on tabulations made from the Public Accounts. Rents received by corporations are obtained from Taxation Statistics and from the special corporation study, and are adjusted to exclude residential rents received. Rents received by insurance companies are available from the reports of the Superintendent of Insurance.
- 282. Net non-farm non-residential rents received by individuals is then estimated on the basis of the ratio of net to gross rents received by persons and unincorporated business as reported in *Taxation Statistics*.
- 283. Residential and non-residential farm rents are estimated in the Agriculture Division of the Bureau. The return accruing on owned and rented farm dwellings is assumed to be equal to 5 per cent of the value of these dwellings. The rent figure thus obtained is then reduced by the amount of mortgage interest paid to allow for the return on capital not supplied by the owner of the dwelling.
- 284. Non-residential farm rents are based on rents in kind and in cash, from the decennial censuses from 1921 to 1951, and from the 1936 and 1946 prairie censuses. Intercensal years are estimated by projecting census figures on the value of farm crops and land per acre.
- (iii) Interest and Dividends Received by Persons from Non-Residents
- 285. Estimates of interest and dividends received by persons from non-residents are supplied by the Balance of Payments Section of the Bureau.

#### (iv) Miscellaneous Investment Income

- 286. In addition to investment income received by life insurance companies on behalf of Canadian policy-holders, this component includes several quantitatively unimportant, miscellaneous categories of income. These are: investment income of fraternal and mutual benefit societies, interest on private industrial pension funds, and the federal government annuities account; profits and interest of mutual non-life insurance companies; and royalties.
- 287. Information on the investment income of federally-registered life insurance companies, consisting of interest, dividends and net rents is ob-

<sup>68.</sup> Only paid rents are included here. Imputed rents of owner-occupied premises used by business are implicitly included in the estimates of profits and net income.

tained from the reports of the Superintendent of Insurance for Canada. Interest on policy loans is treated as interest on consumer debt and excluded. Investment income accruing to non-Canadian policyholders is excluded on the basis of the ratio of liabilities out of Canada to total liabilities of Canadian companies. The total thus obtained is adjusted to take into account investment income of provincially-licensed companies, by applying a ratio of policies in force of provincial licensees to policies in force of federally-registered companies. Dividends received from domestic sources are deducted from the investment income of these companies since they are already included in net corporation profits.

288. Investment income of federally-registered fraternal and mutual benefit societies is estimated in a similar manner to, and from the same source as, that of life insurance companies, except that income accruing to foreign policy-holders is excluded on the basis of premium income. The investment income of provincially-registered societies is based on information contained in reports of provincial departments of insurance.

289. Investment income of industrial pension funds for the years 1938, 1944 and 1953 is obtained from surveys conducted by the Dominion Bureau of Statistics. The figures are projected to other years.

290. Interest on the government amuities account is taken from the Public Accounts of the federal government. Since this interest accrues to individuals, it is included here, rather than with government investment income.

291. Profits and interest of mutual non-life insurance companies is not included elsewhere in the estimates and must be computed separately for all years. This information is obtained from the reports of the Superintendent of Insurance.

**292.** Royalties received by persons are estimated from information supplied by the Department of Mines and Technical Surveys, and from information contained in *Taxation Statistics*.

#### (b) Government Investment Income

293. This item includes profits of government business enterprises, interest on government loans and advances, and interest on public funds.

294. Profits of government business enterprises consist of profits (less losses) of those government enterprises which conduct their activities on an essentially commercial basis, setting a price for their services which is calculated to cover costs. Included here are profits of the Canadian National Railways, wartime crown corporations, provincial liquor control boards, and provincial and municipal public utilities such as hydro-electric systems, telephone systems, street railways and so on. The federal Post Office Department is included here, its gross expenditures being offset against its gross

revenues to arrive at an estimate of profits 69. Net imputed rent on government owned buildings is also included here. The sources of the data are the Public Accounts of the federal and provincial governments, the *Statistical Summary* of the Bank of Canada, reports of the provincial departments of municipal affairs, annual financial statements of various cities and the annual reports of a number of the enterprises concerned.

295. Interest on government loans and advances includes interest on loans to government agencies, such as the Canadian National Railways and various public utilities, and interest on loans to foreign and domestic governments. The estimates are derived from the Public Accounts of the various governments; at the municipal level, information is obtained from the Bank of Canada.

296. Interest on government pension and social insurance funds is obtained from the Public Ascounts, the reports of the Unemployment Insurance Commission, and the provincial Workmen's Compensation Boards. At the municipal level, interest on pension funds is based on an analysis of the annual financial reports of a number of the larger Canadian cities, supplemented by survey data obtained for the years 1945, 1946 and 1949.

#### (c) Adjustments

297. The estimates of corporation profits, bond interest and miscellaneous investment income described thus far include interest on the public debt and the "transfer" portion of interest on consumer debt. These transfers must be excluded from the National Income, as indicated in the review of concepts. Further, the estimates of dividends and interest paid to non-residents, which have been explicitly excluded from these totals, include a portion retained by the federal government in the form of "withholding taxes"; as these withholding taxes are retained in Canada it is therefore necessary to add them back.

298. Interest on the public debt is obtained from the federal and provincial Public Accounts and the Statistical Summary of the Bank of Canada.

299. Interest on consumer debt is estimated by applying an estimated rate of interest to the total amount of consumer debt outstanding (excluding policy loans). The amount of consumer credit outstanding from 1938 on is obtained from the Bank of Canada. For the earlier years the data are compiled from a variety of sources relating to automobile sales, instalment credit, finance company credit, and money lenders' credit. The transfer portion of the total interest is estimated on the basis of a study of profit and expense components of some of the larger institutions extending consumer credit.

<sup>69.</sup> This treatment is approximate only, since no allowance has been made for depreciation on postal properties.

300. Withholding taxes on interest, dividends, etc., paid to non-residents are derived from the Public Accounts of the federal government.

# Accrued Net Income of Farm Operators from Farm Production

- 301. Accrued net Income of farm operators from farm production and the next following component of National Income, i.e. net income of non-farm unincorporated business are accounted for separately in the National Income since they represent a mixture of labour income and investment income which cannot be segregated on anything but an arbitrary basis. To the extent that working proprietors supply their own labour, they earn wages and salaries; to the extent that they supply their own capital, they earn profits, interest and rents. These elements are inextricably mixed in the estimates of the net income field.
- 302. The basic estimates of "net income of farm operators from farming operations" are prepared by the Agriculture Division of the Bureau and adjusted to meet National Accounts definitions. The basic estimates are the subject of a reference paper now in process of preparation by the Agriculture Division of the Bureau. The method of estimation employed in that division is summarized briefly in this section.
- 303. In computing the estimates of "net income of farm operators from farming operations" the Agriculture Division constructs a synthetic operating account for the agriculture industry. Farm cash income from the sale of farm products is first calculated, by type of farm product sold. These estimates rest upon an extensive statistical coverage of the agriculture industry, and include adjustment and equalization payments to farmers by the Canadian Wheat Board. Estimates are made of the value, at farm prices, of food and forest products grown and consumed on farms, and these, together with imputed gross rents on owner-occupied farm dwellings, constitute the value of income in kind received by farmers. The value of the physical change in inventories of grain is computed at average annual prices and livestock held on farms is calculated at an average of three price quotations within the year. These value of physical change figures will be positive or negative according to whether inventory stocks have been increased or depleted. The sum of all these items constitutes gross farm income.
- 304. Farm operating expenses are then deducted from this figure. These include taxes on real estate, gross rents on farm land, labour costs, interest on farm debt, feed and seed, repairs and depreciation, operating costs of farm machinery, fertilizer and so on. The estimates are based on a wide range of sources and methods too extensive for detailed comment here. To the net figure, after deduction of these expenses, are added government payments to farmers on Wheat Acreage Reduction Account and under the Prairie Farm Assistance Act and Prairie

Farm Income Plan. The resulting aggregate is called "net income of farm operators from farming operations"

- 305. For National Accounts purposes, certain adjustments are made to this figure: First, imputed net rents on owner-occupied farm dwellings, and profits of agricultural enterprises organized as corporations, are deducted, since these are included in investment income. Second, payments from the government under the Prairie Farm Assistance Act and Prairie Farm Income Plan are deducted since these are regarded in the National Accounts as transfer payments, and not payments for productive service. Wheat acreage reduction payments, however, are treated as a subsidy in the National Accounts and therefore not excluded.
- 306. The third adjustment allows for differences in the method of calculating the change in farm inventories for National Accounts purposes. In the National Accounts, the value of the physical change in inventories of grains on rarms annually from 1947 to 1956 has been defined as the sum of the change in the four quarters. However, the Agriculture Division calculates an annual value of physical change in inventories based on average annual prices. The difference between the two figures is due to differences in weighting, and an adjustment must therefore be made to reconcile to the National Accounts basis.
- 307. The fourth adjustment consists of an estimate of agricultural net income in Newfoundland (beginning in 1949). Since the Agriculture Division does not yet include that province in its annual surveys, this estimate is added.
- 308. The fifth, and final, adjustment is called 'adjustment on grain transactions' and is made up of two parts. The first part takes account of the earnings arising out of the operations of the Canadian Co-operative Wheat Producers and the Canadian Wheat Board 70. The second part of the adjustment allows for the fact that the earnings of these agencies are calculated on the basis of change in book values of inventories, whereas the required valuation of inventories for the National Accounts is the value of physical change.

#### Net Income of Non-Farm Unincorporated Business

- 309. Net income of non-farm unincorporated business consists of the earnings of working proprietors from their own businesses.
- 310. The methods of estimating net income can be classified broadly into four main groups: (1) the synthetic operating account method wherein estimates of gross income are obtained and brought to a net basis by subtracting expenses; (2) the ratio

<sup>70.</sup> Data obtained from annual reports of the Canadian Co-operative Wheat Producers, the Canadian Wheat Board and Board of Grain Commissioners' reports.

method wherein estimates of gross income are obtained and brought to net basis by the application of a ratio of "net to gross income" based on survey or income tax data; (3) direct enquiry; and (4) projection from benchmark data. In a number of the industrial groups, a combination of two or more methods is required to complete the series back to 1926. To a considerable extent, information in the net income field is of a fragmentary nature, and for this reason a number of the estimates are in some degree arbitrary.

311. The estimates themselves can be grouped under two broad headings: (a) net professional income; and (b) other unincorporated non-farm income.

#### (a) Net Professional Income

- 312. This group includes independent professional practitioners such as doctors, dentists, lawyers and engineers. In general, the estimates for the more recent years are obtained by multiplying average net income by the number of independent practitioners. For the earlier years, the estimates are projected on related data.
- 313. Average net income of independent doctors for the years 1939, and 1944-1946, is obtained from the Survey of Incomes in the Medical Profession in Canada, 1939, 1944, 1945 and 1946 conducted by the National Income Section of the Bureau. For the years 1938, and 1940-1944, average net income is estimated on the basis of dentists' average gross income obtained from Survey of Incomes in the Profession of Dentistry, 1941-1944 (National Income Section) and adjusted for expenses by the ratio of "net to gross income" obtained from the survey of the medical profession. For the years 1947-1956 average net income is obtained from Taxation Statistics.
- 314. The number of active independent doctors in Canada is obtained, for the years 1938-1941, on the basis of the decennial censuses of 1931 and 1941; for the years 1941-1956, from surveys carried out by the Department of National Health and Welfare since 1946, linked to a census benchmark for the 1951 census, and extrapolated to the years 1941-1945, on the trend of medical graduates from universities. The figures are adjusted to exclude salaried doctors, and doctors in the armed forces.
- 315. A similar method is used to estimate net income of independent practicing dentists. Estimates for professionals in "other nearth" (e.g. osteopaths, chiropractors, veterinarians) from 1938-1945, are made by projecting the 1941 census benchmark on the net income of doctors and dentists. From 1946-1952, the net income in this group is estimated by multiplying the number of professionals, based on census and labour force survey data, by an average net income derived from Taxation Statistics.
- 316. A similar method is employed to estimate the net income of professionals in "other community

service" (e.g. musicians, teachers, authors, etc.). From 1953 on, the two groups are combined employing the method used from 1946 to 1952.

- 317. In the case of lawyers, average net income is derived from Survey of Incomes in the Legal Profession in Canada, 1946-1948 (National Income Section); and from taxation data from 1949-1956; and projected back to 1938 on the trend of average net income in the medical profession. Numbers of lawyers are derived from the Bureau survey, the census of 1951, and from a census of lawyers conducted by the Canadian Bar Association.
- 318. The net income of accountants and auditors from 1951 to 1956 is based on *Taxation Statistics*. An estimate of the net income of this group is available for 1941 from the census and for 1944 from an unpublished survey of the Bureau. The net income for the intervening years and to 1938 is projected on the basis of the net income of lawyers.
- 319. Net income of engineers, architects, designers, chemists and metallurgists is extrapolated from a 1941 census benchmark, to 1945 and to 1938, on the basis of an unweighted average index of accountants' net income and construction activity. For the years 1946-1956, the estimates are obtained by multiplying numbers of practitioners by the average net income for the group from *Taxation Statistics*.
- 320. For the years 1931-1937, the estimates for the above groups are carried back on the trend of total net income of professionals paying income tax, obtained from the Department of National Revenue; the figures are projected from 1931 to 1926 on the basis of net income of professionals obtained from the report of the Rowell-Sirois Commission.
- 321. Other professional net income, mainly in the recreational field (e.g. musicians and playwrights), is projected back to 1926 from the 1941 census benchmark on the trend of paid admission to theatres.

#### (b) Other Unincorporated Non-Farm Income

- 322. The non-farm group of other unincorporated business covers a heterogeneous range of industries. Little actual information on net unincorporated income in these industries is available for many of the years covered by this report; for the most part, the estimates rest upon directly related material, but in a number of cases indirect information is used.
- 323. In forestry, the net income from 1946 to date is the product of the number of working proprietors based on labour force data and the average net income based on Taxation Statistics. For 1942, an estimate of net income in forestry was calculated from the returns received by the census of industry in that year. The estimates for the years 1943-1945 are a straight interpolation, while prior to 1942 the estimates are based on projections on related in dicators such as the estimated number of proprietors and the wholesale price index of lumber and timber.

324. In fishing, estimates are obtained by the synthetic operating account method. Gross revenue is taken to be the "value of fish caught and landed" as compiled by the Fisheries Section (Dominion Bureau of Statistics). Estimates are made for wages, depreciation, fuel, repair and miscellaneous expenses, and these are deducted to arrive at net income. The estimate of wages paid in fishing is described in the section "Wages, Salaries, and Supplementary Labour Income". Depreciation is calculated, at the rates allowed by income tax regulations, on the basis of the estimated depreciated value of vessels, boats and other equipment, from 1949 on, and on the basis of original value from 1926 to 1948. Repair costs are taken as an arbitrary percentage of capital value. Fuel costs are estimated for the year 1941 and 1951 on the basis of a percentage of sales of tax exempt gasoline in Nova Scotia, adjusted upwards for Canada on the basis of power boats used in fishing in Canada (Fisheries Statistics); this estimate is then projected to other years on a composite index of gasoline prices and the tonnage of power boats employed. The estimate of miscellaneous expenses is taken as a percentage of gross revenue.

325. Gross income of hunting and trapping is taken to be the gross value of Canadian fur production as reported annually by the Agriculture Division, adjusted to eliminate sales by fur farms. Wages and salaries paid to employed guides and trappers, and an estimate of miscellaneous expenses are deducted to arrive at net income.

326. In mining, the number of proprietors of unincorporated mining establishments by type is obtained from the 1931, 1941 and 1951 decennial censuses. Average net income is estimated separately for prospectors and placer miners and for other mining proprietors on the basis of data compiled by the Mineral Statistics Section (Dominion Bureau of Statistics) and from the decennial censuses. Total net income derived by this procedure is projected to other years on the basis of Canadian gold prices, in the case of prospectors and placer miners, and of non-metallic mineral prices for other mining proprietors.

327. Tabulations of the gross revenues of unincorporated manufacturing establishments are made from census of industry returns for the years since 1946. The estimates are brought to a net basis by applying a ratio of "net to gross" revenue obtained from Taxation Statistics. For the years 1926-1945, the 1946 figure of the gross value of production in unincorporated industries is extrapolated on the total of gross value of production of selected industries; the 1946 ratio of "net to gross" income is applied to the gross figures back to 1926.

328. Net income in repair service, for the years 1946-1956, is estimated by multiplying the number of working proprietors (from the labour force survey and the 1951 census) by an average net income assumed to be a constant proportion of the average

net income of unincorporated retail trade proprietors. For the years 1926-1946, net income in repair service is compiled from information on numbers of proprietors and average salaries obtained from the 1931 and 1941 decennial censuses. Net income for own account workers is assumed to be equal to wages and salaries paid in the respective subgroups, while the net income of employers is raised by an arbitrary percentage. These benchmark figures are then adjusted to other years on the basis of related series. For garages and automobile services, an index of consumer purchases of gasoline sales is used. In blacksmithing, the projecting series is an index of farm expenditures on blacksmithing services. For tailors and dressmakers, the figures are adjusted on the trend of net income of laundries, dyeing and cleaning establishments. In photography, the total of net income in personal services is used for extrapolation. Miscellaneous repair services are adjusted to other years on the basis of net income of laundries, dyeing and cleaning establishments. For the years 1942-1944, a further adjustment is made to the series thus obtained to bring the grand total of these estimates to the level of the series from 1946-1956, described above.

329. In construction, net income from 1953 on is estimated by multiplying the number of proprietors, obtained from labour force surveys, by the adjusted average net income of contractors as found in Taxation Statistics. A benchmark for 1946 is calculated in the same manner except that the average net income is based on returns filed with the Construction Section of the Bureau. The resulting figure is projected to 1952 on an index based on a gross net ratio obtained from Taxation Statistics and total new and repair investment in residential housing. The 1946 figure of average net income is carried back to 1942 on the basis of an index of wage rates in building construction, and multiplied by estimated numbers of proprietors. For years prior to 1941, estimates of net income are calculated by projecting benchmarks from the 1931 and 1941 decennial censuses on the trend of a combined index of volume and wage rates in construction.

330. From 1953 on, the net income in transportation and communication is the product of the number of proprietors from the labour force surveys and average net incomes from Taxation Statistics. From 1947-1952, net income in transportation is based on data collected by the Public Finance and Transportation Division, adjusted to the 1953 benchmark. In 1945, a special analysis of financial statistics collected by this division was made to establish net income of road transport carriers. This estimate is projected to other years (1926-1937 excepted) on the basis of employment in road transport, in the case of freight and passenger carriers, and by an index of gross revenues of taxi companies, in the case of small carriers. For the years 1926-1937, benchmark estimates are obtained from decennial census data, and adjusted to other years, for small carriers, on a combined index of taxi registrations and truck drivers' wages, and, for large carriers, on a special index of employment in road transport. In water transport, a special survey by the Transportation Section provides estimates for the years 1938, 1941, 1944 and 1945. These figures are projected back to 1926 on an index of employment in shipping and stevedoring, and forward to 1946 on the trend of net income of firms reporting to the Transportation Section.

- 331. In unincorporated retail stores, operating result surveys conducted by the Merchandising and Services Section for the years 1941, 1944, 1945, 1946, and every two years thereafter, provide data which are used to calculate a weighted average ratio of "net profits (before withdrawals) to net sales". Net sales are estimated, for the years 1926-1956, on the basis of benchmark data from the 1931, 1941, and 1951 decennial censuses, projected to other years on the trend of estimated unincorporated retail sales. Net income is obtained by applying the "sales to profit" ratios to these data.
- **332.** Estimates of net income of unincorporated wholesale establishments, since 1947, are derived from *Taxation Statistics*. For the years 1938-1946, a benchmark figure based on the numbers of proprietors and average earnings from the 1941 decennial census is projected on the index of wholesale sales published by the Merchandising and Services Section. For the years 1926-1937, the estimates are based on data from the report of the Rowell-Sirois Commission.
- 333. Since 1946, net income in finance, insurance and real estate, is derived from Taxation Statistics, with appropriate adjustments. For other years, estimates are made separately for each industry in this group and the total tied in with the year 1946. Net income of stock and bond dealers is estimated, for 1941, from decennial census data and projected to other years on an index of the total value of shares traded on the Toronto and Montreal Stock Exchanges. An estimate of the net income of insurance and real estate agents for 1943 is based on a special survey conducted by the Merchandising and Services Section; for other years projections are made on annual information on commissions paid by fire insurance companies compiled from reports of the Superintendent of Insurance for Canada.
- 334. Service other than professional service, enumerated above, includes personal, recreational, and business service, and boarding and lodging. Estimates of net income in the personal services group are calculated by sub-groups: barbering and hairdressing, dyeing, cleaning and pressing, laundries undertaking, hotel and tourist camps, restaurants, cafés and taverns. In most cases, the method consists in multiplying the number of proprietors obtained from the census of population by the average net income based on the retail services census. Projections are then made on various related indexes such as the gross annual receipts of power, cleaning and dyeing plants, as reported to the Merchandising and Services Section, tourist expenditures in Canada (Balance of Payments Section), and so on.

- 335. In recreational service, similar benchmark estimates are made; projection to other years is on the basis of an index of receipts (excluding taxes) of motion picture theatres.
- 336. Net income from boarding and lodging is based on data from Family Expenditures, 1947-1948, Dominion Bureau of Statistics. One-half of gross revenue in these years is allowed for expenses, and the resulting figures of net income are projected to other years on the trend of restaurant sales.

#### **Indirect Taxes Less Subsidies**

- 337. Indirect taxes represent a part of the market price of goods and services which is not received by factors of production. They are, therefore, not included in the National Income, but must be added to factor costs to arrive at total costs entering into market prices.
- 338. Subsidies represent amounts contributed by governments toward current costs of production. For this reason, they must be deducted from factor costs to arrive at Gross National Product at market prices.

#### (a) Indirect Taxes

339. For the most part, the indirect tax figures included here are based on analyses of the Public Accounts of governments made in the National Income Section, or for presentation in the reports of various Royal Commissions. The figures represent collections of revenue and are not adjusted to an accrual basis to allow for the lag between the time the taxes enter business costs and the time the collections are remitted to the government; adequate information to permit such adjustment is not available.

#### (i) Federal Indirect Taxes

- 340. Indirect taxes levied by the federal government consist of: (1) customs import duties; (2) excise duties and taxes; (3) taxes on corporations other than on profits (e.g. bank note circulation tax and tax on net premiums of insurance companies); (4) the business share of privileges, licenses and permits where no direct service by the government is involved; and (5) the levy against farmers under the Prairie Farm Assistance Act.
- 341. For the period 1938-1956, the data are taken from the Public Accounts of the federal government and converted to a calendar year on the basis of monthly figures published by the Comptroller of the Treasury. For the period 1926-1937, the data are obtained from the report of the Rowell-Sirois Commission and are by fiscal years ending nearest December 31 of the calendar year.

#### (ii) Provincial Indirect Taxes

342. Provincial indirect taxes consist of: (1) the business share of motor vehicle licenses and permits; (2) privileges, licenses. permits and fees not involving any direct service by the government, in-

cluding miscellaneous taxes on natural resources such as timber dues, stumpage fees and water leases; (3) gasoline taxes; (4) retail sales taxes including provincial taxes on liquor and tobacco; (5) real and personal property taxes; (6) taxes on corporations other than on profits; and (7) miscellaneous taxes including amusement taxes, timber, mining and oil royalties, and forest fire prevention assessments.

- 343. Only the business share of motor vehicle licenses and permits are regarded as indirect taxes, the personal share being treated as direct personal taxes. It may also be noted that the liquor taxes specified here refer only to non-operating revenues of liquor commissions in the form of malt taxes, beer gallonage and wine taxes, brewers' taxes and retail licenses; they do not include the "net revenues from sales" of liquor commissions, which are treated as profits of government business enterprises.
- 344. The sources of the provincial estimates for the years 1952-1956 are the Public Accounts of the various provinces. The data thus obtained are for fiscal years and are converted to calendar years on the trend established by provincial quarterly financial statements submitted to the Bureau.
- 345. For the years 1938-1951 the Public Accounts of the various provinces are also the source of the provincial estimates. For the years 1926-1937, data are obtained from the reports of the Rowell-Sirois Commission, and Comparative Statistics of Public Finance (Dominion-Provincial Conference on Reconstruction), supplemented by information from the Public Accounts. All figures from 1926-1951 are by fiscal years ending nearest December 31 of the calendar year.

#### (iii) Municipal Indirect Taxes

- 346. Municipal indirect taxes consist mainly of real property taxes. These are treated as indirect whether on owner-occupied or on rented property. Since inclusion of imputed rent on owner-occupied property in National Income involves regarding the owner-occupier in the dual role of landlord and tenant, this treatment is appropriate. Municipal indirect taxes also include sales and amusement taxes, and the business share of licences, permits and fees where no direct service is rendered by the government.
- 347. The sources of the municipal estimates are the reports of the Rowell-Sirois Commission, the 1946 supplement to the *Statistical Summary* of the Bank of Canada, and subsequent relevant monthly summaries published by the Bank of Canada.

#### (b) Subsidies

348. The greater part of the subsidy figure consists of federal production and consumption subsidies which are made with a view to price stabilization. Such payments are usually made in order that the consumer may benefit from lower prices, but

occasionally the purpose may be to protect the producer against a decline in the price of his product. Federal subsidies can be divided into three main classes: (1) Agricultural subsidies, which include wheat acreage reduction payments, premiums on livestock, subsidies on milk, cheese, and butterfat, freight assistance on western feed grains for livestock feeding purposes, and subsidies on oats and barley (2) Business subsidies which include: import subsidies on petroleum, cotton, coal and coke; and domestic subsidies, including drawback to millers, emergency assistance to gold mines, payments under the Maritime Freight Rates Act, subsidies for milk consumption, and steamship subsidies for mail; (3) Trading losses on operations of government commodity agencies, such as the Commodity Prices Stabilization Corporation, the Canadian Wool Board, the Agricultural Prices Support Board, the Fisheries Prices Support Board, and the Canadian Wheat Board. In the case of the Canadian Wheat Board, trading operations on any crop account may extend through several years; an increase in the trading loss is regarded as a positive subsidy while a recovery in the trading loss is regarded as a negative subsidy, equivalent in effect to an indirect tax 71.

- 349. For the period 1938-1956, the data are obtained from the Public Accounts of the federal government, from the published reports of the agencies concerned, or directly from government officials. For the most part, the figures are on a calendar year basis. For the period 1926-1937, the data are obtained from the reports of the Rowell-Sirois Commission, and are by fiscal years ending nearest December 31 of the calendar year.
- **350.** Provincial subsidies are paid to agriculture in the form of freight assistance on limestone for fertilizer, western feed grains, and other products. Production subsidies are paid on wool, cheddar cheese, sugar beets, bacon, hogs, and livestock for breeding purposes. Business subsidies include payments on iron ore and peat, the operation of ferries, and the publication of text books.
- 351. The provincial figures are taken from the Public Accounts. They are by fiscal years ending nearest December 31 of the calendar year from 1926-1951, and are converted, as described above, to calendar years from 1952-1956.
- 352. There are no subsidies paid by municipal governments.

# Capital Consumption Allowances and Miscellaneous Valuation Adjustments

353. Allowances for current consumption of capital, deducted to arrive at profits and net income included in the National Income, must be added back to arrive at Gross National Product at market prices. In

<sup>71.</sup> Where trading profits are earned on individual crop accounts, they are regarded as accrued net income of farm operators from farm production.

view of the impossibility of arriving at a figure of the true economic consumption of capital, it is necessary to use current accounting allowances for depreciation, obsolescence and amortization as a basis for the estimate, although these may vary widely from capital consumption in the economic sense. Allowance of some different amount would involve a corresponding adjustment in profits, and thus in National Income, but would not affect the total of Gross National Product. It is convenient to view the entries made under this heading as the sum of true capital consumption and a "valuation adjustment".

- 354. In some cases, outlays essentially capital in nature are charged by business to current expenses. Capital outlays of this nature are included in the estimates of business gross fixed capital formation in Gross National Expenditure; they must therefore be included as a component of Gross National Product to preserve the balance of the Accounts. Conversely, certain non-tangible outlays capitalized by business are deducted under this general heading.
- 355. The claim portion of insurance against fire and other damage to business property (including all residential property), is regarded as analogous to depreciation in that it is included in market prices but does not represent income of any factor of production, and in that it is a cost in maintenance of the national capital. It is therefore included under this heading. An estimate is also included for the claim portion of business insurance against financial loss, e.g. fidelity insurance.
- 356. Bad debt allowances (less recoveries) are also included here because they enter into the market price of goods and services in Gross National Expenditure but do not represent income of any factor of production. The figures used are the amounts charged by business as operating costs. Other items included under this general heading are business scrap and salvage allowances and net business sales of used motor vehicles.
- **357.** Depletion charges are not included with depreciation, for the reasons cited in the section on corporation profits: Imputed depreciation on government buildings is included.
- 358. The methods of estimating this component of the National Accounts may be divided into four basic classes: first, consolidation of individual accounts; second, projection from benchmark data on related series; third, ratio method, using directly related data; and fourth, ratio method, using indirect data. In a number of cases, a combination of methods is necessary to complete the series back to 1926. The following classification refers, in general, to the estimates for the current years.
- **359.** The first method includes all estimates of corporation depreciation, the claim portion of business insurance, bad debt allowances, and depreciation of certain government business enterprises. The

second method covers unincorporated manufacturing and retail trade. The third method is used for most municipal public utilities, certain unincorporated business groups, such as agriculture, fishing, construction, wholesale trade, finance, insurance and real estate, elements of the service group, and the bulk of the estimate "capital outlay charged to current expense". The fourth method covers the remainder of unincorporated business, such as transportation, communication and certain of the service industries.

#### (a) Depreciation or Capital Cost Allowances

#### (i) Incorporated Business

- 360. For incorporated companies the basic source of the information since 1944 is *Taxation Statistics*, issued by the Department of National Revenue. Comparable estimates for other years are obtained from the special corporation sample study. In addition to regular depreciation provisions, certain amortization charges are included here. The exact content of the item changes from time to time in accordance with changes in taxation regulations or procedures.
- 361. A number of adjustments to the basic estimates are necessary. An allowance for depreciation in banking and insurance, not included in Department of National Revenue tabulations, is made. In the case of banks, the data are obtained from published reports of the chartered banks. Depreciation on real estate holdings of insurance companies included in operating expenses reported to the Superintendent of Insurance is included.
- 362. Some firms do not submit complete financial returns in time for inclusion in Department of National Revenue tabulations. An allowance for depreciation of these firms is therefore made by inflating the tabulated data by the ratio "profits of all firms to profits of firms reporting depreciation". Finally, the data are adjusted from the taxation year to a calendar basis using information obtained from the Department of National Revenue.

#### (ii) Government Business Enterprise

363. Depreciation charged by federal, provincial and municipal government enterprises is obtained from the Public Accounts, published annual reports, of provincial departments of municipal affairs, summaries prepared by the Bank of Canada, and by correspondence. In the case of municipal governments, some recourse is made to estimation, as available information is not in all cases sufficient to complete the estimate.

#### (iii) Unincorporated Business

364. For unincorporated companies, estimates are obtained from a variety of sources. Figures of farm depreciation are prepared by the Agriculture Division, Dominion Bureau of Statistics, in connection with estimates of net farm income; an adjustment is made to exclude depreciation charged by incor-

porated companies engaged in agriculture. In forestry, no specific allowance is made, the information in this sector being inadequate. The amount involved is known to be small. In fishing, estimates of depreciation are prepared in connection with the estimates of net income in this industry. No allowance is made for hunting and trapping or for unincorporated mining enterprises, the amount of capital employed not being significant.

365. In manufacturing, depreciation for both incorporated and unincorporated industries (excluding repair and custom work) is available for a number of years from the "capital expenditures schedule" used in connection with the annual survey of intended and realized investment expenditures (General Assignments Division, Dominion Bureau of Statistics). A special classification of returns for the year 1946 permits figures to be obtained separately for unincorporated companies. The latter are inflated to full coverage by means of a production ratio. An estimate of depreciation in repair and custom work is also added. This estimate is made as follows: a controlling ratio is devised using labour force survey data, on the assumption that depreciation in repair and custom work is in the same relation to the labour force as depreciation in manufacturing proper.

366. Estimates for the years 1926-1945 are obtained by extrapolation from the 1946 benchmark on the trend of depreciation in a selected group of incorporated manufacturing industries, comprising those industries where unincorporated business is largely concentrated. This information is obtained from the special corporation sample. For the years since 1947 projection is based on a composite index of the average gross revenue per proprietor of unincorporated manufacturing firms multiplied by labour force estimates of the total number of proprietors engaged in manufacturing and repair.

367. In construction, a special tabulation of construction census returns for the year 1946 provides an estimate of gross value of work done in the construction industry by form of organization. The ratio of depreciation (from Taxation Statistics) to gross revenue for incorporated concerns in the construction industry is calculated, and applied to the gross revenue estimate for "unincorporated business with paid employees" to obtain an estimate of depreciation in this group. (Self-employed proprietors in the construction industry are assumed to have no depreciation expenditures; an allowance for capital outlay charged to current expense is included for this group in the final totals.) Estimates for other years are made by assuming a constant relationship between depreciation for incorporated and unincorporated companies.

368. In transportation and communication estimates of depreciation for unincorporated freight and passenger carriers (excluding taxis) are based on annual surveys conducted by the Public Finance and Transportation Division, Dominion Bureau of Statistics. Estimates of depreciation on taxis for 1946

are obtained by multiplying the estimated number of cabs (based on registration data) by an assumed average depreciation. The latter estimate is based on information respecting the cost of passenger automobiles and the number of years for which the cost may be amortized under income tax regulations. For years subsequent to 1946, depreciation is assumed to be a constant percentage of gross revenues of taxi companies as calculated in connection with the estimates of personal expenditure for taxi service. For the years 1926-1945 the estimates are projected on the trend of net income of this group.

369. In wholesale trade, information on the relative share of business done by incorporated and unincorporated firms is obtained, for census years, from the census of merchandising. It is assumed that there is a correlation between sales and depreciation, and extrapolation is based on the trend of depreciation for incorporated companies.

370. In retail trade, estimates of total sales of unincorporated retail stores are multiplied by the ratio "depreciation to sales". The sales estimate is obtained by subtracting from total retail sales (prepared in the Merchandising and Services Section, Dominion Bureau of Statistics), estimated sales of incorporated establishments (based on Taxation Statistics), co-operative stores sales (based on data from the Department of Agriculture), and government liquor store sales (from provincial published reports). The ratio "depreciation to sales" is obtained regularly for a sample of unincorporated stores by the Merchandising and Services Section, Dominion Bureau of Statistics, as part of a continuing survey of retail operating expenses.

371. In finance, insurance and real estate, estimated depreciation valued at current replacement cost on non-farm residential property is computed in connection with the estimates of net rents in investment income. Depreciation on rented commercial property, (largely in the field of retail trade and service) is computed as a percentage of gross commercial rents paid. The proportion of depreciation to gross rents is derived from an analysis of revenue and expense statements of a sample of incorporated real estate companies. The gross rent estimate is also prepared in connection with estimates of net rents in investment income. The sum of these items is adjusted to exclude depreciation on residential and commercial property owned by corporations. This estimate is calculated as a proportion of total rents received by corporations (Taxation Statistics).

372. Depreciation in professional service is estimated on the basis of information respecting apparent disappearance of professional equipment, prepared in conjunction with the estimates of business gross fixed capital formation, and supplemented by data respecting the numbers of automobiles owned by doctors, and maximum rates of depreciation on equipment and automobiles allowed by income tax regulations.

373. In other service groups, including recreational, personal and business service, an estimate of depreciation in the year 1948 is built up from a variety of sources. In general, the method is to adjust the figures of depreciation in the incorporated service industries by a ratio of the relative proportion of business done by incorporated and unincorporated companies as obtained from the census of services. This estimate is extrapolated on the trend of depreciation in incorporated service companies.

#### (iv) Non-Commercial Institutions

374. In the case of universities, information respecting depreciation charges or their equivalent has been collected since 1949 by the Education Division, Dominion Bureau of Statistics. The amount is very small and no estimate is made prior to 1949. For hospitals, information on operating expenses including depreciation is collected regularly by the Institutions Section, Dominion Bureau of Statistics. No allowance for depreciation is made in the case of buildings and equipment owned by religious, welfare and social organizations. To the extent that these organizations operate on rented premises, however, depreciation on the property they occupy is included with depreciation on rented commercial property under finance, insurance and real estate.

#### (v) Co-operatives

375. Estimates of the value of fixed assets owned by co-operative organizations in Canada are obtained for each year from 1932 to date from the Department of Agriculture. Depreciation is calculated by applying the ratio "depreciation to fixed assets" as determined for incorporated companies engaged in similar activities. For years prior to 1932, the estimates are arbitrary.

#### (vi) Government Buildings

**376.** A rather arbitrary estimate of depreciation on government buildings is prepared in connection with estimates of gross and net imputed rent on such buildings.

#### (b) Capital Outlay Charged to Current Expense

37. This item includes turniture, furnishings, some office equipment, automobiles, tools, jigs, dies, and so on, which have been charged to current expense rather than capitalized. Various methods are employed in estimating the industry-wise components of this item; in general, however, the estimates are obtained through comparisons of "investment in machinery" as reported by business, with the apparent consumption of producers' machinery and equipment as indicated by statistics of production, imports and exports. In the case of agriculture, an estimate of the value added to farm construction by the labour of the farm operator and hired employees is included.

**378.** In the case of steam railways, amounts are included respecting retirements and renewals charged to operating expenses in lieu of depreciation, based on data published in the D.B.S. report *Railway Transport*.

#### (c) Non-Capital Outlays Charged to Capital Account

379. This item, which is a deduction, consists chiefly of amounts spent by businesses and charged to capital account on mining and oil development and exploration, other than outlays for construction and equipment included with business gross fixed capital formation and exclusive of payments for land, leaseholds or drilling rights and existing assets. The information is obtained from the General Assignments Division of the Bureau.

# (d) Claim Portion of Business and Residential Insurance

380. The information necessary to compute this estimate is obtained from the annual reports of the Superintendent of Insurance for Canada. An allowance for payments made by steam railways with respect to damage to property and livestock, derived from data published in the D.B.S. report Railway Transport is included. Included here also are comparatively small estimates reflecting fire loss to government buildings deducted in calculating imputed rent and charges respecting fire loss included in operating expenses of the Central Mortgage and Housing Corporation.

#### (e) Business Scrap Salvage, and Trade-In Allowances

381. Scrap and Salvage — This item is estimated from data collected by the Bureau's Industry and Merchandising Division and United States experience, relating to iron and steel and non-ferrous scrap consumption and export.

382. Trade-In Allowances — An estimate of the value of net purchases by the personal sector of used motor vehicles sold or traded by the business sector is included here.

#### (f) Net Bad Debt Losses

383. This item consists of the amount set aside each year by business to cover anticipated losses through non-payment of accounts, adjusted for recoveries of debts formerly written off as uncollectable. The latter are included with corporation profits. For incorporated companies the information is obtained from Taxation Statistics and the special corporation sample study; in some cases it is necessary to project on the trend of sales of individual industries. In the case of chartered banks the series included is the amount of retained income not carried to profit and loss account, and is obtained for recent years from the annual returns of the chartered banks published in the Canada Gazette. For earlier years the amounts are estimated on the basis of information supplied by the Bank of Canada.

384. Net amounts set aside by unincorporated business engaged in retail trade are obtained by applying a ratio of "bad debts to sales" obtained from surveys conducted by the Merchandising and Services Section, to estimated annual sales of unincorporated business. No allowance is made for bad debts in other types of unincorporated business, since information in this field is almost wholly lacking.

# (g) Stock and Bond Commissions and Real Estate Commissions

385. This item, which is a deduction from the total, is based on information on gross revenue from commissions of brokers and agents reported in *Taxation Statistics*. As noted in the concepts description, the estimates refer only to that portion of capitalized commissions originating in connection with business non-residential property transfers.

#### (h) Amortization, Development Write-Offs, Deferred Maintenance, and Miscellaneous Charges to Reserves

386. These items are charged as expenses in the calculation of profits entering the National Income and must be added back here. The sources for the estimates are chiefly *Taxation Statistics* and published reports of government business enterprises and public utilities.

#### GROSS NATIONAL EXPENDITURE AT MARKET PRICES

### Personal Expenditure On Consumer Goods and Services

387. This component comprises personal expenditure of Canadian residents, (including implied expenditure out of income in kind), on consumer goods and services during the accounting period. All types of consumer durable goods are included. Purchases of houses, however, are regarded as capital goods, and are shown with the estimate of business gross fixed capital formation. The rental value of owneroccupied houses is included, as are the operating costs of private non-commercial institutions, insurance companies, etc. (see paragraphs 120-125). The estimate includes expenditures of Canadian residents temporarily abroad, (e.g. tourists, members of the armed forces), and excludes expenditures of foreign residents temporarily in Canada. All expenditures that are regarded as business costs are excluded. Allowances are made for the trade-in value of used goods sold by persons to business.

388. The estimates are calculated under three broad categories: commodities, services, and net expenditure abroad.

#### (a) Personal Expenditure on Commodities

389. This estimate consists of purchases of commodities by persons, and implied expenditure out of income in kind. The general method of estimating purchases of commodities is to adjust the figure of total retail sales obtained from the 1930, 1941 and 1951 merchandising censuses and annual surveys conducted by the Merchandising and Services Section of the D.B.S. to include commodities purchased by individuals through non-retail outlets, as well as certain provincial and local taxes which are not included in the retail sales figures. Deductions are made to exclude the value of non-personal purchases of commodities at retail, the value of trade-in allowances of used goods, and the receipts by retailers for repairs and services which are estimated separately under personal expenditure on services. Included in the service deductions is an allowance for the service portion of meals and beverages purchased for on-premise consumption. These adjustments are outlined more explicitly in the following paragraphs.

#### (i) Total Retail Sales

390. The value of retail sales is published in reference paper #56 (Industry and Merchandising Division, D.B.S.) for the years 1930 to 1953 inclusive and is available thereafter annually from the reports of the above division. The following adjustments are made to the years 1930 to 1932 and 1942 to 1946 inclusive to correct for technical details. Retail sales, as shown by the 1930 Census of Retail Establishments, are corrected for the volume of sales on account of establishments which went out of business after they had been listed in the census but prior to the enumeration of their retail sales data. This correction is smoothed out to the year 1932 on the basis of related material. For the years 1942 to 1946, the cumulative figure of withdrawals of retail stores, having been measured in 1947, is distributed to follow the pattern of business failures within the retail trade group for these years. The 1926-30 period is extrapolated on the basis of the trend of retail sales of selected incorporated retail sales establishments as indicated in the corporate profits sample survey.

# (ii) Commodities Purchased Through Non-Retail Outlets

391. A significant volume of retail sales to individuals occurs through outlets not ordinarily classified as retail stores, and these must be added to the retail sales figures as derived above. Included here are retail sales by manufacturing bakeries and dairies (house-to-house deliveries). The data are obtained from the Manufactures Section and the Animal Products Section, Dominion Bureau of Statistics. Direct sales to consumers by farmers, pedlars, hucksters, etc. are added based upon information obtained from family budget expenditure data and commodity flow estimates. With respect to wood products, data are available from the 1930, 1941 and 1951 censuses of merchandising and services, the 1941 and 1951 censuses of agriculture, an estimate prepared by the former Fuel Controller, and currently from the Forestry Section, Dominion Bureau of Statistics.

392. Refinery sales of fuel oil and kerosene to consumers are estimated, for 1930, 1941 and 1951 from the censuses of merchandising and services,

and projected on the trend of selected types of oil sales obtained from the Mineral Statistics Section, and retail price data obtained from the Prices Section. Sales of coke and coal to consumers by wholesale firms are also based on 1930, 1941 and 1951 census data, adjusted to other years on the trend of sales of coke and coal by retail establishments.

393. Estimates of subscription and newsboy sales of newspapers and magazines for 1941 are calculated from data prepared for the Combined Production and Resources Board (The Impact of War on Civilian Consumption, 1945), and the 1941 census of merchandising. For 1951 an estimate of subscriptions and newsboy sales of newspapers and magazines is determined using family expenditure data and a retail valuation of publishers' production. Projection to other years is on the total of Canadian publishers' revenue from newspaper and magazine sales and subscriptions (Forestry Section, D.B.S.) combined with the value of imports of magazines and newspapers.

394. Consumer purchases in railway dining and buffet cars are obtained annually from the Trans portation Section of the Dominion Bureau of Statistics. Purchases of alcoholic beverages through hotels and public houses are available for 1930, 1941 and 1949 and subsequent years from the censuses of hotels conducted by the Merchandising and Services Section. Estimates for other years are obtained by interpolation on an index of wholesale sales of liquor stores and brewers' warehouses. Purchases of meals and merchandise through hotels are similarly available for the years 1930, 1941 and 1949 and subsequent years, and an index of restaurant sales is used for interpolation.

395. Retail sales by manufacturers not otherwise classified, are estimated, for the years 1930 and 1951 from a special study carried out as part of the 1931 and 1951 censuses of merchandising. Corresponding estimates for other years are made on the assumption that the ratio of retail sales by manufacturers to total retail sales less the restaurant group is the same as in census benchmark years.

396. Retail sales by wholesalers are obtained for the years 1930, 1941 and 1951 from the census of merchandising, and projected to other years on a weighted index of retail sales. Commodity sales by service establishments such as barber shops and garages are also derived from 1930, 1941 and 1951 census data and adjusted to other years on retail sales indexes.

#### (iii) Provincial and Local Taxes

397. In general, retail sales estimates include federal sales and excise taxes, but do not include certain types of local and provincial sales taxes. These must therefore be added to bring the estimates of retail sales to persons to a market price valuation. Data are obtained in connection with the estimates of indirect taxes.

#### (iv) Non-Personal Purchases at Retail

398. Non-personal purchases at retail, which are deducted from the estimate of total retail sales, are, in general, estimated by commodity groups. The major portion of building materials and hardware sales are deducted on the assumption that these are business purchases. The portion that is purchased by owner occupiers and tenants for household maintenance purposes is excluded from this deduction. Total sales of building materials and hardware are obtained from the 1930, 1941 and 1951 censuses of merchandising and services. The total is then interpolated on the trend of the sales of lumber and building material dealers. The personal use portion is determined for 1951 from family expenditure survey data and extrapolated on the combined index of occupied dwellings and cost of repairs per dwelling as indicated by C.M.H.C. data.

399. Business purchases of gasoline, oil and grease are estimated residually. Total gasoline, oil and grease sales by retail establishments are obtained from the 1930, 1941 and 1951 censuses of retail establishments. The total is then interpolated on the trend of garage and filling station sales. A personal use portion of 30 per cent was determined for 1930 and extrapolated on a composite index reflecting total retail sales in this group and the changing proportion of personal and business consumption as indicated by registrations of passenger and commercial vehicles. In 1948 and 1953, the personal use level is tied into family expenditure survey data for these years.

400. Sales of new commercial vehicles are excluded in their entirety together with a portion of new passenger vehicles for business use. The basic data are supplied by the Merchandising and Services Section of the D.B.S. The business-use portion of passenger vehicles is determined for the year 1951 by applying the ratio of the average turnover period by business, as indicated in the Investment Forecast Survey (1954) to the stock of business-owned passenger vehicles. This level of business purchases of new passenger vehicles is then extrapolated on the trend of commercial vehicle sales. In the war years, 1942-45, a considerably higher proportion was deducted.

401. Business purchases of auto parts and accessories are obtained by a similar method to that used in estimating the business consumption of gasoline, oil and grease. The benchmark data for the personal use portion are extrapolated on a composite index reflecting the trend of wholesale sales of auto parts and the changing proportion of personal and business consumption as indicated by registration of passenger and commercial vehicles.

402. In addition to ensuring that the estimates of consumer expenditure include only the personal use portion of new car sales (see paragraph 400), the retail sales data must be adjusted to ensure that the net personal use portion of used car sales is also accounted for. Sales of used cars by motor vehicle dealers (and used car dealers) to both the

business and personal sectors are included in the basic source data on retail trade. An adjustment is therefore made to remove that part of used car sales which is sold to the business sector. The balance represents gross sales of used cars to the personal sector. At the same time, however, a further adjustment must be made to take account of the trade-in allowances received by consumers, which in effect constitutes sales of used cars from the personal to the business sector (see paragraphs 406, 407). These procedures result in the inclusion in consumer expenditure of net purchases of used cars by consumers from the business sector. (See also paragraph 69).

403. The value of meals and beverages charged to business and government expense accounts is computed by applying the ratio of meals and beverage expenditures to total travel expenditures as indicated by the federal government Public Accounts (data supplied by the Comptroller of the Treasury) to the aggregate travel expenditures of business and government. Benchmarks of total travel expenditure of the manufacturing, wholesaling, retailing and government industries are computed independently and are extrapolated on the trend of total wages and salaries paid within each group. The manufacturing benchmark is established by the survey of manufacturing expenses conducted in connection with the Rowell-Sirois Commission; the wholesaling and retailing benchmarks are established by surveys of operating costs of wholesale and retail establishments conducted by the Merchandising and Services Division. Federal government travel expenditures are obtained from the Public Accounts.

**404.** Wholesale sales by retail establishments are excluded, since these are assumed to be wholly business-use purchases. The 1930, 1941 and 1951 benchmarks (census of merchandising and services) are interpolated on a specially weighted index of retail sales.

405. Purchases of tractors, farm implements and parts are included either with farm operating expenses or in the estimates of business gross fixed capital formation, hence they are excluded here. Benchmark data are obtained from the 1930, 1941 and 1951 census of merchandising. The series is interpolated on the trend of farm machinery sales for the years 1926 to 1941 as computed by the Agriculture Division and thereafter by the Merchandising and Services Section. Estimates of hay, straw, and feed are also excluded, being assumed to be wholly business costs. The 1930, 1941 and 1951 benchmark figures are projected on an index of feed and seed purchases prepared by the Agriculture Division and commencing in 1951 on the trend of the sales of hav. straw and feed dealers as prepared by the Merchandising and Services Section.

#### (v) Other deductions

**406.** Trade-in allowances and purchases of used vehicles by motor vehicle dealers are established from *Taxation Statistics* and other sources for 1951.

and for 1954 and thereafter on the basis of a special survey of motor vehicle dealers conducted by the Merchandising and Services Section of the Bureau. Other years are interpolated on the trend of an analysis of operating costs of motor vehicle dealers as indicated by returns of a survey conducted by the same section.

407. In the case of used car dealers, 80 per cent of the selling value of used vehicles is assumed to be the value of trade-ins on purchases of used vehicles. This ratio is obtained from a survey conducted by the Merchandising and Services Section in 1937 and the census of merchandising in 1941. Sales of used car dealers are established by the 1930, 1941 and 1951 censuses of merchandising and are interpolated on the trend of a special survey of the sales of used car dealers conducted by the Merchandising and Services Section

408. Similarly the value of trade-in allowances and purchases of other used goods by retailers must be excluded from total retail sales. Benchmark data on the value of used goods sales are obtained from the 1930, 1941 and 1951 censuses of merchandising, interpolated on the trend of the general retail sales index. To this series the proportion of trade-in allowance is applied as indicated by the 1941 census of merchandising for second-hand stores, excluding used car lots. No special allowance is made for war surplus sales, since an adjustment to exclude these from Gross National Expenditure is made to government expenditure on goods and services.

409. Since the estimates in this section refer wholly to commodities, repair and service receipts are deducted from the total of retail sales and are included in personal expenditure on services below. The estimate consists mainly of repair and service receipts of garages and jewellery stores plus retail credit charges of all stores granting credit services. In addition the service portion of meals and alcoholic beverages sold for on-premise consumption is included. These are obtained for 1930, 1941, and 1951 from the census of merchandising and services, and projected on a specially weighted index of retail sales.

#### (vi) Income in Kind, Goods

410. An imputation is made to personal expenditure for the value of goods consumed out of income in kind. In each case the figures included in expenditure are based on the estimates used for the income side. The item is comprised of food and fuel produced and consumed on farms, food to non-farm workers and issues in kind to the armed forces.

411. The estimate of food and fuel consumed on farms is a part of the calculation of net farm income prepared by the Agriculture Division. It includes the estimated value of all types of home-grown produce consumed by farm families and hired help, based on average farm prices. Food received and consumed

by non-agricultural workers is computed in connection with the estimates of wages, salaries, and supplementary labour income. The value of lodging supplied to both farm and non-farm groups is not included here, being classified to the services estimate.

412. Estimates of food and clothing issued to the armed forces are prepared in connection with the figures of military pay and allowances.

#### (b) Personal Expenditure on Services

- 413. This includes the value of services rendered directly to individuals as distinct from those rendered to business or to government. For many classes of services, a preponderant proportion of total revenue is represented by sales to individuals, and the presence of business services is not an important source of error. In those classes where sales to business or government form an important part of total revenue (e.g. railway transportation, post office), data as to the amount of such sales are not always available and arbitrary allowances must be made.
- 414. For certain classes of services, the census of industry, annual surveys, or published reports of the Bureau and other agencies give information regarding personal expenditure. Other groups depend upon the 1931, 1941 and 1951 censuses of merchandising and services, with projections to other years being made on directly related series. In some cases, benchmark estimates are taken from census data but projections must be made on indirect evidence regarding trends. In a considerable number of cases, the estimates are explicitly articulated with calculations on the income side, and the reader is referred to the appropriate section for a description of sources and methods.
- 415. As already noted, services of private noncommercial institutions (hospitals, charitable institutions, etc.) are measured by the expenses of these institutions, rather than by the fees paid by individuals. Services of insurance companies are also measured by their expenses.
  - (i) Services Covered by Census of Industry, Annual Surveys, or Published Statement
- 416. Annual surveys of power laundries and cleaning and dyeing establishments conducted by the Merchandising and Services Section provide data on the total revenue of these establishments. Allowances are made for revenues arising out of nonpersonal expenditures.
- 417. Bridge, tunnel and ferry tolls on international connections are obtained from the Transportation Section of the Bureau. Data on the passenger revenues of steam railways, electric railways and buses, air carriers, express companies and steamships are also obtained annually from the Transpor-

tation Section. Deductions for non-personal use are made based upon information received from the major operators.

- 418. Revenues of central electric stations from domestic consumption are supplied by the Public Finance and Transportation Division. Data on sales of natural and manufactured gas sold to household consumers are obtained from the Industry and Merchandising Division. Personal moving expenses are obtained from information collected in the annual survey of the motor carrier and warehousing industries carried out by the Public Finance and Transportation Division.
- 419. Gross revenues of cable and telegraph companies and receipts from personal use of telephone service are supplied by the Public Finance and Transportation Division. An adjustment is made for non-personal expenditure on cables and telegrams. Data on post office revenues are taken from the Public Accounts of the federal government, an arbitrary allowance being made for non-personal transactions.
- **420.** The estimate of services rendered to persons by hospitals is based on annual surveys of the Institutions Section. The amount included under this heading is equal to the operating expenditure of private non-commercial hospitals (including municipal hospitals), plus receipts from paying patients in provincial and federal hospitals, plus revenues of private hospitals organized on a commercial basis. Operating costs of privately operated sickness and accident insurance plans are included; these are obtained from reports of the Superintendent of Insurance for Canada. Operating or administration costs of prepaid voluntary medical insurance plans are obtained annually from the Department of National Health and Welfare. Since a portion of personal medical care expenses is paid for by business under workmen's compensation schemes, a deduction is made to exclude this amount from personal expenditure. The data are based on information from reports of Workmen's Compensation Boards and the Bureau of Statistics publication, Railway Transport Part II.
- 421. The estimate of services rendered by universities is measured by total operating costs plus estimated receipts of university residences from board and lodging 72. The information is obtained from the Education Division. The value of services rendered by institutions engaged in life, personal property, automobile and theft insurance is also measured by their operating costs (including profits); these data are available from the reports of the Superintendent of Insurance for Canada, and they are adjusted arbitrarily to exclude the business portion.

<sup>72.</sup> Total operating costs do not include expenses of university residences.

# (ii) Services Estimated on Basis of Directly Related Series

422. A number of the service groups depend upon projection from benchmark data on the trend of directly related series. In most cases, the 1931, 1941 and 1951 censuses of merchandising and services provide the benchmark material. Thus, estimates of personal expenditure for jewellery repairs and engraving are based on the 1931, 1941 and 1951 censuses, projected on an index of jewellery store sales. Personal expenditure on automobile repair and maintenance in these three benchmark years is projected on the trend of sales of garages and filling stations. Expenditure on taxi cabs is adjusted to other years on the basis of a composite index of wage rates and taxi registrations. Personal expenditure on shoe-cleaning and repair, upholstery and furniture repair, and radio, television and appliance repair are interpolated on the trend of the sales of shoe stores, furniture stores, and appliance stores respectively.

423. Funeral and burial expenses are based on receipts of funeral and undertaking establishments obtained from the census of services, 1931, 1941 and 1951, adjusted upward to allow for receipts of cemeteries and crematories. Projection is on the trend of a composite index of deaths and average wage rates.

424. Gross receipts of commercial recreation establishments, including motion picture threatres, billiard parlors, bowling alleys, camps and tourist grounds, are obtained from the 1930, 1941 and 1951 censuses of services. Federal and provincial amusement taxes, from the Public Accounts, are added to this basic figure. Projection is made to other years on the trend of receipts of motion picture theatres, adjusted to include taxes.

**425.** Personal expenditure for hotel accommodation is based on data obtained for the years 1930, 1941, 1947, and subsequent years from surveys conducted by the Merchandising and Services Section. The figures are adjusted to other years on the trend of receipts of Canadian National Railway hotels.

#### (iii) Estimates based on Indirect Evidence

426. In some cases, projection from reliable benchmark estimates is made on the basis of inadequate information concerning trends. Thus, census benchmark data on barber and beauty parlor care are extrapolated on the trend of population and consumer price data. In the case of the operating expenses of charitable and benevolent (private non-commercial) institutions, survey data from the Institutions Section are available for selected years. Projection is made on the basis of the consumer price index. Miscellaneous personal services, established for census benchmark years, are extrapolated on the trend of selected personal services. Personal expenditure on dress-making is established for benchmark years from the labour force census and extrapolated on the combined trend of the volume of piece goods sold

through retail department stores and the average hourly wage paid in the garment manufacturing industry.

# (iv) Estimates Explicitly Articulated with the Income Side

427. A number of the estimates required to compute expenditure on services have already been made in connection with calculations of components of the Gross National Product. Some of these estimates may be used directly without adjustment, but others require modification before they can be integrated with the expenditure side. For a description of basic sources and methods, the reader is referred to previous sections of this review; only the adjustments made to the basic estimates are outlined here.

428. Farm and non-farm residential space rents (including garages) paid and imputed are calculated in connection with the rent component of investment income (see paragraphs 266-284). Landlord facility expenses, which occur in both rented and owned shelter, such as fuel, electricity, janitor services, etc. are implicitly included in the separate estimates of goods and services consumed by persons. The rental value of furniture and equipment as determined in the computation of space rent is supplemented by an estimate of furniture and appliance rental by retail establishments.

429. Wages and salaries (including income in kind in the form of food received) of domestic servants are calculated in connection with the estimate of wages, salaries, and supplementary labour income. The estimate is used here without adjustment.

430. Personal expenditure for board and lodging is taken as being equal to net income from boarding and lodging, which is included in net income of non-farm unincorporated business. The figure is included on a net basis in this case since expenses relating to boarding and lodging are implicitly included in personal expenditure for food, rent, fuel and so forth.

431. Estimates of personal expenditure for services of physicians and surgeons, dentists, nurses, miscellaneous health services, and lawyers are all related to the estimates of net income of the professional service groups (see net income of nonfarm unincorporated business). It is assumed that the ratios "gross to net income", established by the various surveys conducted in these professions, are constant for all non-survey years. Gross income for non-survey years is computed by applying these ratios to the estimates of net income in the various professional groups. Non-personal use deductions are made from these gross estimates based upon information obtained from sample surveys of the individual professions.

432. Personal expenditure for commercial and trade school instruction is based on calculations made for wages, salaries, and supplementary labour

income. It is assumed that wages and salaries represent two-thirds of the operating costs of these establishments. Gross revenues from individuals are computed on this basis. Personal expenditure on other private instruction is estimated as a constant percentage of this series, based on the relation obtaining in 1941.

- 433. An estimate of the expenditures of religious organizations is included in personal expenditure on services as an imputation. This estimate is based on the assumption that the wages and salaries paid (calculated in connection with wages, salaries, and supplementary labour income) represent one-half of the expenditure of these organizations not included elsewhere. This estimate is then increased by 20 per cent to allow for expenditure of service groups and similar types of welfare organizations.
- 434. The value of free lodging supplied to non-agricultural workers occupying non-residential property such as bunk-houses, hotels and steamships is added here as imputed expenditure. The calculation is made in connection with wages, salaries and supplementary labour income.
- 435. Personal expenditure for banking services, both paid and imputed, is obtained from the Bank of Canada. Imputed banking services are entered explicitly in the calculations of investment income. The estimates of the net personal expenditure on consumer debt interest are based upon calculations made in estimating investment income.
- 436. The personal share of brokerage charges and investment counselling costs is included here as a direct expenditure. The income of unincorporated stock and bond dealers is determined from Taxation Statistics from the year 1944 onward. An arbitrary ratio of one-third is applied to all years to arrive at the personal expenditure portion. This series is then extrapolated on the trend of stock market activity as indicated by the Prices Section.

#### (c) Net Personal Expenditure Abroad

- 437. This net adjustment is necessary to include, in personal expenditure, the expenditures of Canadian residents in foreign countries, and to exclude the expenditures of non-residents in Canada. The adjustment covers net expenditures of members of the armed forces, as well as net tourist expenditures. In addition, net private remittances to non-residents are included to correspond to the contraentry in the balance of payments component. To the extent that gifts in kind sent abroad do not appear in retail sales (e.g. Red Cross parcels) an estimate of their value is also added. An arbitrary adjustment is made to Canadian tourist expenditures abroad to exclude expenditure chargeable to business expense accounts.
- **438.** The data are obtained from the Balance of Payments Section, Dominion Bureau of Statistics, and the Department of National Defence.

#### Government Expenditure on Goods and Services

- 439. This component consists of the outlays of federal, provincial and municipal governments (including municipal school corporations) for currently produced goods and services. The figure is essentially a residual one, derived by eliminating from government budgetary expenditures all outlays which are not made directly to purchase new goods and services - i.e. subsidies, transfer payments to individuals and private non-commercial institutions, transfers to other governments 73, losses of government-owned enterprises, provisions for debt retirement, reserves, write-downs and other bookkeeping adjustments, and purchases of land and used capital assets. The expenditure of the Post Office Department is also eliminated, since this agency is treated in the National Accounts as a government business enterprise.
- 440. A number of adjustments are made to this residual figure: extra-budgetary expenditures on goods and services of agencies not treated as government business enterprises (e.g. War Assets Corporation, Canadian Broadcasting Corporation, Workmen's Compensation Boards) are added; sales of goods and services by governments are transferred from revenue and deducted to avoid double counting in the Gross National Expenditure (these sales are included with expenditures of the other sectors); refunds of previous years' war expenditure, arising from negotiation or cost audits, are allocated to appropriate years and deducted, in order to correct the over-statement of government budgetary expenditure which was made at that time (data obtained from Department of National Revenue and the Public Accounts); war asset sales which are reflected in other components of the Gross National Expenditure are offset, since these goods ought not to be counted in production of the current year (data obtained from War Assets Corporation); finally, net purchases of government commodity agencies are added.
- 441. Government expenditure on goods and services includes both current expenditure, e.g. wages, salaries, supplies, and operating expenses: and outlays for new buildings, highways, etc. called gross fixed capital formation. It should be noted that while the total figure of government expenditure on goods and services is obtained from the Public Accounts and other reports as described below, the fixed capital formation data are taken from the reports, Private and Public Investment in Canada, Outlook published jointly by the Department of Trade and Commerce and the Dominion Bureau of Statistics. The current expenditure data are taken as the difference between total government expenditure on goods and services (calculated residually as above) and government gross fixed capital formation.

<sup>73.</sup> Expenditures on goods and services financed by inter-governmental transfers are included at the level of the government which spends the funds for goods and services.

- 442. The figure of government expenditure on goods and services includes an estimate of gross imputed rent on government-owned buildings. The imputed rent is based on a projection of a 1954 benchmark for space owned by government and an especially constructed commercial rent index. The statistical quality of the imputed rent estimate is rather weak, but is included in order to improve invariance in the Gross National Product with respect to ownership or non-ownership of buildings by governments as well as to indicate that such buildings produce an economic service. (See also paragraph 30).
- 443. International capital transactions of a purely financial nature, such as repatriation of securities and loans and advances abroad, are excluded from government expenditure on goods and services, since such transactions merely represent methods of providing foreign countries with the means of payment for Canadian exports, and do not in themselves measure the current economic production of Canadian factors. Insofar as the means of payment provided by these transactions are used to purchase goods and services in Canada, they are reflected in the figures of exports, and therefore in Gross National Expenditure. Cash gifts abroad are included with government expenditure on goods and services and in imports in the Canadian balance of international payments; they therefore cancel out in the Gross National Expenditure. (When however, the funds are used to purchase Canadian goods and services, they are reflected in exports and hence in Gross National Expenditure). Similarly, advance payments by the Canadian government to foreign governments for military procurement are included in both government expenditure and in imports. In this manner, such payments are excluded from the Gross National Expenditure (as they should be, since no Canadian production is involved).
- 444. Government expenditure on goods and services thus consists of purchases from Canadian business and non-residents; foreign aid; wages and salaries of government employees; military pay and allowances, including that paid abroad; other military expenditures abroad; and imputed rent on government-owned buildings.
- 445. At the federal level, the basic data on budgtary expenditures are obtained for the years 1938-1956 from a detailed analysis of the Public Accounts and other published reports; the figures are converted to a calendar year on the basis of monthly information obtained from the Comptroller of the Treasury. For the years 1926-1937, the data are obtained from an analysis of the Public Accounts published as an appendix to the report of the Rowell-Sirois Commission; in the latter case, the figures are by fiscal years ending nearest December 31 of the calendar year.
- **446.** The source of the provincial estimates for the years 1952-1956 are the Public Accounts of the various provinces. The data thus obtained are for

- fiscal years and are converted to calendar years on the trend established by provincial quarterly financial statements submitted to the Bureau.
- 447. For the years 1938-1951, the data are also derived from the provincial Public Accounts and other published reports. For prior years, data are taken from the report of the Rowell-Sirois Commission, Comparative Statistics of Public Finance, and supplemented by information from the Public Accounts of each province. All figures from 1926-1951 are by fiscal years ending nearest December 31 of the calendar year.
- 448. The municipal estimates are obtained from the report of the Rowell-Sirois Commission, the 1946 supplement to the *Statistical Summary* of the Bank of Canada, and subsequent relevant monthly summaries published by the Bank of Canada. In all cases, the municipal data are by calendar years.

#### **Business Gross Fixed Capital Formation**

- 449. Business gross fixed capital formation, as defined in the National Accounts, includes expenditures for new construction and new machinery and equipment by private and government business enterprise and also private non-commercial institutions. Expenditure of persons for new housing (including major improvements and alterations) are also included, since individuals, in their capacity as homeowners, are treated as business enterprisers.
- 450. Expenditures on durable assets by governments, (other than government enterprises), are included with the total of government expenditure on goods and services; they are therefore excluded from business gross fixed capital formation. On the other hand, special capital outlays by foreign governments in Canada during the war years are included with business gross fixed capital formation, since it is difficult to classify these expenditures elsewhere in the National Accounts.
- 451. Estimates of new construction and new machinery and equipment are on a "gross" basis, in the sense that no allowance for depreciation of existing capital facilities has been deducted. Accurate estimates of net capital formation for the economy as a whole are not possible in the light of available information. This topic is discussed more fully elsewhere.
- 452. Only new construction and new machinery and equipment are included; purchases of land, used buildings, and domestic second-hand machinery and equipment are excluded since they do not represent current production of goods and services. Imports of used machinery are, however, included since they are additions to Canada's capital formation; like all imports they are also offset by a corresponding debit under imports of goods and services.
- 453. Replacements and major alterations are treated as capital formation, but ordinary repair and maintenance expenditures are not. The theoretical

distinction between capital and current outlays broadly resembles that adopted for the purpose of measuring net income for income tax purposes; however, certain specified expenditures (such as office furniture and equipment and small tools) which may be treated by business as current operating expenses, are included here as "capital outlay charged to current expense" (see paragraphs 377, 378). Moreover, statistical procedures of estimating expenditures on durable assets do not, for the most part, refer to income tax records, so that some statistical discrepancies may exist as between the magnitudes used here and those consistent with profits and net income in the Gross National Product. Where feasible, such discrepancies have been offset by a "valuation adjustment" (see paragraphs 379-386).

- 454. For current years, over-all estimates of gross private and public investment (capital formation) in Canada are prepared jointly by the General Assignments Division of the Dominion Bureau of Statistics and the Economics Division of the Department of Trade and Commerce; the historical series back to 1926 is obtained from the background study Private and Public Investment in Canada, 1926-1951, published by the Department of Trade and Commerce. In some cases, estimates appearing in this document have been revised to take account of new data. Business gross fixed capital formation appearing in the National Accounts is derived from these more comprehensive estimates by eliminating the government non-business portion as defined for the National Accounts. The latter portion is included in government expenditure on goods and services.
- 455. To summarize, the resulting series consists of expenditures on durable assets by private business, government business, and non-commercial institutions. In the years 1939-1945 the series also includes the wartime expenditures of the United States in connection with the Alaska Highway and the Northern Staging Routes, and of the United Kingdom in connection with expansion of plant facilities, all of which drew upon Canadian production but were not originally Canadian Government expenditures.
- **456.** A detailed description of sources and methods employed to compute the over-all estimates of private and public investment is contained in the abovementioned study *Private and Public Investment in Canada*, 1926-1951. For convenience of reference, a summary of these methods is given here.
- 457. For the years 1926-1946, the available information is less complete, and in a number of cases the estimates are arrived at by applying related indexes to more recent benchmark years.
- (a) Business Gross Fixed Capital Formation, (excluding housing and institutional capital formation)
- **458.** In agriculture, the estimates are obtained as follows: (a) non-residential construction is estimated for 1940 and 1950 as the value of materials pur-

chased by farmers (decennial Census of Agriculture). adjusted to allow for labour costs, and to exclude the value of residential building (estimated by the Central Mortgage and Housing Corporation). The resulting figure of non-residential construction is projected for the whole period on a composite index of retail sales of building materials and farm income. Expenditure on new machinery and equipment is built up from several sources. Since 1936, purchases of farm implements are taken from Farm Implement and Equipment Sales, Dominion Bureau of Statistics, with an adjustment to allow for markup. For earlier years, estimates are based on a series reflecting "available supply", i.e. total production of farm machinery and equipment, adjusted to exclude exports and include imports. Farm purchases of commercial and motor vehicles are based on data on numbers of vehicles on farms, obtained from the Census of Agriculture and projected on the trend of total sales of motor vehicles. Onehalf of estimated passenger vehicle purchases by farmers is assumed to be for business use.

- **459.** The estimated value of machinery and equipment used in **fishing** is available from *Fisheries Statistics of Canada*, Dominion Bureau of Statistics, for the whole period. New investment is taken to be the increment added each year to the value of equipment, after adding an allowance for write-offs.
- 460. In forestry, estimates for the years since 1941 are obtained from the capital expenditure survey. Estimates for the years 1926-1940 are arrived at by applying to a 1941 base the trend indicated by the value of forest production, obtained from Forest Production, Operations in the Woods in Canada, Dominion Bureau of Statistics. Division between construction, and machinery and equipment, is made on the basis of ratios established from the survey.
- 461. In mining, the estimates are based, since 1941, on the capital expenditure survey. For the years 1926-1940, the estimates are obtained by applying to the 1941 base the trend of capital expenditures in mining, as indicated by a Bureau survey in 1940 which covered the preceding period. The total estimate is divided between new construction and new machinery and equipment with the aid of data on production and import of mining machinery.
- 462. The contract construction industry is not included in the capital expenditure survey until 1947. From 1926-1946, estimates of new machinery and equipment are based on the special corporation sample study. New construction is then estimated as a constant percentage of the machinery and equipment total, based on ratios observed in more recent survey years.
- 463. For the public utilities group (including transportation, storage and communication), estimates since 1941 are obtained for most sub-groups from the capital expenditure survey. A variety of sources is used for the early years. In the case of central electric stations and gas works, data for the years 1926-1940 are obtained from analysis of the

statements of the more important power companies and commissions, and inflated on the basis of the ratio of total revenues of central electric stations and gas works to revenues of the sample group. For steam railways, estimates for 1926-1940 are obtained from analysis of statements of the Canadian National Railways, from the Dominion Bureau of Statistics publication on railway transport, and by direct correspondence. For electric railways, all the more important companies were canvassed directly for selected years and inflated to complete coverage on the basis of revenue ratios. Intervening vears are obtained by interpolation on the trend of a number of large companies for which data are available for all years. Investment in the telephone industry for the years 1926-1940 is based on the capital expenditures of the four largest private companies and all provincially-owned companies, compiled from annual reports, and adjusted to complete coverage by revenue ratios (Telephone Statistics, Dominion Bureau of Statistics).

464. Municipal waterworks expenditures are estimated by an analysis of financial statements, for four selected years prior to 1944, of the larger municipalities. These data are blown up to full coverage on the basis of a ratio of capital expenditure on waterworks to total municipal capital expenditure. The returns to a survey of all the larger municipalities were inflated to full coverage to obtain a benchmark figure. Estimates for years not covered are obtained by straight line interpolation. Estimates for earlier years for other related industries, including water transportation, motor carriers, grain elevators, broadcasting, air transportation and warehousing, are obtained, in general, by projection from benchmark data. Related series such as ship deliveries and imports of commercial vessels, value of construction work on grain elevators, storage capacity of grain elevators, and numbers of licensed radio stations, are used to establish trends. Changes in the value of capital equipment used in the motor carrier industry (Motor Carriers: Freight-Passenger, Dominion Bureau of Statistics) and in the air transport industry (Civil Aviation, Dominion Bureau of Statistics) are used to obtain investment in these industries. The amount of investment in oil pipe lines is significant only in recent years and is obtained by examination of company accounts.

465. In the manufacturing, trade, finance and commercial services groups, estimates since 1946 are obtained from the capital expenditure survey. For the years 1926-1945, trends, computed on the basis of data from the special corporation sample, are applied to the 1946 benchmark figures established from the survey. Separation of construction from machinery and equipment is on the basis of the average ratios which prevailed in 1946-1950.

#### (b) Housing and Institutional Capital Formation

**466.** Estimates of housing construction are prepared by the Central Mortgage and Housing Corporation 74, using a variety of data, including monthly

74. See also Firestone, O.J. Residential Real Estate in Canada (University of Toronto Press, 1951).

surveys of housing starts and completions, census data on housing stock, building permit records, indices of construction costs and sample returns from contractors.

- 467. Outlays on churches, universities, private schools and private and public hospitals are obtained for recent years from the capital expenditure survey.
- 468. For earlier years, the estimates of construction for churches are based on the value of work performed by contractors on churches and church halls (Construction in Canada, Dominion Bureau of Statistics). Equipment is calculated as a percentage of construction based on ratios from the survey. The change in value of plant and equipment used in universities (Survey of Higher Education, Dominion Bureau of Statistics) is used to project the 1947 survey figure of construction for this group. Equipment is taken as a fixed proportion of the construction estimates.
- 469. Construction of private hospitals in earlier years is based on the trend of work done by contractors on hospital buildings (*Construction in Canada*, Dominion Bureau of Statistics), applied to the 1947 survey figure. Machinery and equipment is taken as a constant ratio of the resulting series.
- **470.** Municipal hospital construction in earlier years is based on data from *Comparative Statistics* of *Public Finance*; and machinery and equipment is taken as a fixed proportion of the construction figure.
- (c) Government (Non-Business) Fixed Capital Formation 75 (Excluding Institutions and Housing)
- 471. In general, the federal and provincial estimates in the most recent period are based on the Public Accounts data supplemented with survey results, and on the Public Accounts in the earlier years. At the federal level, Public Accounts data are also supplemented by information on defence investment expenditures supplied by the National Defence Department.
- 472. At the municipal level, figures for selected years are built up from an analysis of the available municipal statistics, and adjusted to other years by interpolation. For the years 1942-1946, the estimates are computed by projection from a 1944 benchmark on the trend of total municipal construction expenditures as obtained from the supplements to the *Statistical Summary* of the Bank of Canada. Since 1947, provincial governments have conducted surveys or prepared estimates which provide the material for the series.

#### Change in Inventories

473. In this publication an effort to clarify terminology has resulted in the substitution of the term "non-farm business inventories" for the previously

<sup>75.</sup> Included with government expenditure on goods and services.

used term "business inventories". The new term "non-farm business" is taken to cover all inventories excepting those of "agriculture" and "grain in commercial channels" (See Table 26).

474. The non-farm business component includes the change in inventories occurring in private business and government business enterprises, without any deduction for inventory reserves. Investment in grain inventories by the Canadian Wheat Board is included, but net purchases by various government commodity agencies not organized as business enterprises are excluded since they are included with government expenditure on goods and services. Government net purchases of strategic materials and the pre-financing of private inventories by the government are included with government expenditure on goods and services, and are therefore excluded here.

475. A major change is made in the presentation of inventory data in this publication. In previous reports investment in inventories in the non-farm industries was estimated on the basis of reported book values. These book values reflect the accounting conventions of business in which, generally, inventory withdrawals in the period are valued at original cost. As a component of Gross National Expenditure, the relevant investment in inventories is the physical change during the period, valued at average prices of that period, which is closer to a replacement cost basis. Charging withdrawals out at original cost rather than at the average price of the current period gives rise to an inventory "gain" or "loss" which is retained in the book value and, being inappropriate for national accounting purposes, is removed by an inventory valuation adjustment. The present publication incorporates back to 1926 the value of physical change series as investment in inventories in place of the previously published change in book values. On the income side of the Accounts, the adjustment affects corporate profits and net income of unincorporated business wherever these are computed on the basis of changes in reported book values. However, the adjustment is shown as a single entry on the income side principally because data are not yet available to break down the entry into its corporate and unincorporated business components. For the years since 1946 the annual value of physical change is taken as the sum of the four quarterly estimates.

476. For inventories held on farms and grain in commercial channels, comprehensive figures on the quantities of physical stocks are available from the Agriculture Division of the Bureau. These are valued at appropriate prices as indicated below, and the value of physical change is thus obtained directly. However, as has been indicated elsewhere, accrued net income of farm operators contains the earnings arising out of the operation of the Canadian Cooperative Wheat Producers and the Canadian Wheat Board. These are computed on the basis of changes in book values in the conventional business manner. For this item as well as for grain inventories

privately held by dealers (whose income is included in wholesale trade), inventory valuation adjustments are necessary to the income side of the account. It should be noted that the adjustment in the case of the operations of the Canadian Co-operative Wheat Producers and the Canadian Wheat Board is made directly to accrued net income of farm operators. The inventory valuation adjustment relevant to grain privately held in commercial channels is included in the inventory valuation adjustment shown in line 7 of Table 1.

**477.** The following description of sources and methods for non-farm business inventories refers first to the estimates based on reported book values; a description of the inventory valuation adjustment and the value of physical change series then follows in paragraphs 493-515.

478. For current years, estimates of annual book values of inventories for many industries are available through annual census or sample surveys carried out by the Industry and Merchandising and the Agriculture Divisions of the Bureau. When these data are inflated to full coverage for the relevant industries, by the use of inventory to production or to sales ratios, they are estimated to account for between eighty and ninety per cent of inventory book values. Estimates for the remaining industries are based on data from a variety of sources including special tabulations, Taxation Statistics and the published annual reports of companies. For earlier years, mainly before 1944, sources include the special corporation study (see paragraphs 525-538), analysis of the records and reports of the Industry and Merchandising Division of the Bureau, and projections from decennial census data. In general, before 1947, year-end holdings of inventory are reported on a fiscal year-end basis; since 1947, data are available from the manufacturing industry which permit adjustment to a calendar year basis. New sample surveys introduced to cover the years 1954 onward for wholesale and retail trade permit more comprehensive coverage of these groups on a calendar year basis. In the case of agriculture, calendar year data are available also for most of the earlier years of the 1926-1956 series.

479. Farm inventories are based on comprehensive figures of physical stocks available from the Agriculture Division of the Dominion Bureau of Statistics. The value of the physical change of inventories of grain on farms is computed at average annual prices for the years 1926 to 1946 inclusive. For the period 1947 to 1956, use is made of the sum of the change in the four quarters of the year valued at quarterly average prices. The physical change in livestock and poultry held on farms is valued for all years on the basis of an average of three price quotations obtained from regular surveys, viz., December, June and December. The sum of livestock, poultry and grain estimates provides the estimate of farm inventory change.

- 480. In the case of livestock, most of the data are available on a calendar year basis since 1932. In the case of grain, the data for the period 1926-1946 are collected as at March 31 and adjusted to a calendar year basis; after 1946, data are available on a calendar year basis.
- 481. In forestry, estimates of year-end holdings for the years 1926 to 1944 are made by projecting back a 1944 base figure on the trend of a composite index of employment and payrolls in logging. The 1944 base figure is derived from the investment survey capital schedule reported book values, inflated to full coverage by applying the inventory production ratio of reporting firms to the value of production in forestry. The latter figure is obtained from the publication Operation in the Woods (D.B.S.), and adjusted to exclude forest production of farmers and the proportion applicable to other industrial groups. A similar method is employed for the years 1945 to 1948 inclusive. For current years, the 1948 estimated book value is advanced by an index prepared from a sample report of physical stocks valued at average prices. The price data are based on annual averages available in the publication Pulp and Paper Industry (D.B.S.), average weekly earnings and unit values of exports of certain forest products.
- 482. Mining. For the years 1926 to 1943 inventory estimates are prepared from inventory data collected by the Mining, Metallurgical and Chemical Section of the Dominion Bureau of Statistics. From 1944 to 1948 the estimates are based on inventory data collected by the Dominion Bureau of Statistics for the investment survey capital schedule. Subsequent years are estimated from inventory data collected by the Commodity Section and Inventories Section of the Industry and Merchandising Division, Dominion Bureau of Statistics. The estimates for the current years, before this material becomes available. are made by advancing the latest year-end value on the trend of an index of raw materials and finished goods. This index is prepared from available physical stocks data revalued with appropriate price series and supplemented with employment and pavrolls data.
- 483. In manufacturing, inventory estimates are based on inventory questions on the census of industry returns for the years 1926 to 1943. For the years 1944 to 1948 the capital schedule was used. In subsequent years, the estimates were prepared from inventory data collected by the Commodity Section and Inventories Section of the Industry and Merchandising Division (D.B.S.). The data include raw materials and supplies, goods in process and finished goods. Adjustments are made to exclude trading inventories held at selling outlets as these are considered part of wholesale inventory. In the case of smelters and refineries conducting both mining and manufacturing operations, the stocks on hand are split where possible between the two fields of activity. Privately-held inventories financed by government progress payments are excluded. These government payments are included in government

- expenditure on goods and services. For the war years, the progress payments estimates are based on data supplied by the Department of Munitions and Supply. Currently these are estimated from data supplied by business firms to the Inventories Section of the Industry and Merchandising Division, Dominion Bureau of Statistics.
- 484. Construction. For the period 1926 to 1943 inclusive, the 1938 value is moved forward and backward on a combined index of employment in the building industry and prices in the building materials industry. Reference is also made to the special corporation study and to retail chain store stocks. The 1938 value is obtained from a survey of construction carried out in that year. Since 1944, the main source of information is Taxation Statistics with the values adjusted to provide coverage for unincorporated business. Estimates for current years for which taxation data are not yet available are obtained by advancing the series on a combined index of employment in construction and building material prices.
- 485. Transportation, storage and communication are divided into three main groups for separate estimation and summed to get the total for the industry as a whole. Estimates of inventory book values for railway transportation and telephone communications are obtained annually from the Transportation Section of the Bureau. Estimates for the third group, including electric railway, air, water and road transportation, storage and forms of communication other than telephone are based on Taxation Statistics data and on published annual reports of selected companies. Estimates for current years for which taxation data are not yet available are made by advancing the last available benchmark data on the trend of reported railway and telephone inventories, supplemented by available published annual reports.
- 486. In public utilities inventory data are estimated from annual surveys conducted by the Census of Industry and the Transportation Section for the years 1926-1947 inclusive. Since 1947, because collection of inventory data of public utilities was discontinued by the Bureau, estimates are based on material from the Bank of Canada Statistical Summary, and the published annual reports of individual companies, including those set up as government business enterprises.
- 487. Grain in commercial channels. The change in book value of inventories of grain in commercial channels is obtained by multiplying the physical stocks at the beginning and end of the period by the initial prices paid to producers, and differencing the results. The value of physical change is made on the basis of average annual prices 1926-1946 and quarterly average prices 1947-1956. In the case of wheat, the calculation is made separately for each grade.

- **488.** The data necessary to the above calculations are available in *Grain Trade of Canada* and *Grain Statistics* (weekly) published by the Agriculture Division of the Bureau.
- 489. Wholesale trade inventories for the years 1926 to 1951 are based on decennial census data with the intervening years estimated from the special corporation study material, supplemented by monthly indexes of wholesale inventories of non-durable goods compiled by the Merchandising and Services Section of D.B.S. Since 1945, information from the Operating Results Reports compiled by the Merchandising and Services Section is also used. The 1951 decennial census data are advanced directly on a monthly survey of wholesale establishments conducted by the Merchandising and Services Section. Taxation Statistics data are used as a further check on the estimates.
- **490.** In retail trade the estimates are based on decennial census book values. Several sources including the special corporation study, the monthly index of retail sales, *Taxation Statistics* and the *Operating Results Reports* are used to establish the trend between census dates. In later years, special monthly surveys for department stores, chain stores and independent stores are available for projecting retail trade. In 1954 the survey of independent stores was substantially revised and expanded. Surveys of chain stores and department stores have been available since 1948 and 1941 respectively.
- 491. In the service group, benchmarks are established from the decennial census of retail services and *Taxation Statistics* with adjustments for undercoverage and to exclude repair services included in manufacturing. Prior to 1946 the intervening years are estimated on the trend indicated by the special corporation study. Subsequently, and in current years before basic data become available, an index of wholesale, retail and manufacturing inventories is used to establish the level of book values.
- 492. For the finance, insurance, and real estate group, benchmarks for 1945 and subsequent years are established from Taxation Statistics, with allowance for unincorporated business and banks and insurance carriers. The 1945 benchmark is carried back to 1926 on an index of wholesale and retail trade inventories. In current years, before taxation statistics are available, the trend of inventories in manufacturing, wholesale and retail trade is generally used for extrapolation.

#### **Inventory Valuation Adjustment**

493. While coverage for inventory data, in terms of reported book values, is incomplete, it is sufficient to permit fairly comprehensive estimates to be made. The adequacy of the final estimates of investment in inventories as used in the National Accounts, however, is also affected by adjustments introduced to place the appropriate valuation on these book value estimates.

- 494. As indicated above, for national accounting purposes, the change in value of inventories should be measured in current prices of the period under consideration, and to the extent that other methods of valuation differ from this, an inventory valuation adjustment is needed. The following paragraphs outline some of the problems to be faced in this regard and the method used to derive the adjustment. The valuation adjustment on the expenditure side is necessary only for non-farm business inventories. The use of physical stock data valued directly at appropriate prices, renders the adjustment unnecessary for farm and for grain in commercial channels inventories on the expenditure side.
- 495. In a period of rising prices, for example, book changes of inventory consumed in production or sale, on an original cost basis, fall short of prices of the current period, and business accounting at the end of the period records greater investment in inventories and higher profits than are appropriate for the National Accounts; in effect an element of gain, analogous to capital appreciation is included. Conversely, in times of falling prices, investment in inventories and profits are understated for National Accounts purposes. This situation is illustrated by the very simple numerical model given below.

# 496. Inventory Account (A.Withdrawals at Original Cost)

	No. of units	Price	Value
(i) Beginning Inventory	100	\$4	\$400
(ii) Add: Purchases	100	\$5	\$500
(iii) Deduct: Withdrawals (at			
original cost)	-100	\$4	\$-400
(iv) Ending Inventory	100	\$5	\$500
(v) Change in Book Value of			
Inventory over the period			\$100

# For National Accounts (B. Withdrawals at Current Price)

	No. of units	Price	Value
(i) Beginning Inventory	100	\$4	\$400
(ii) Add: Purchases	100	\$5	\$500
(iii) Deduct: Withdrawals (at			
current price)	-100	\$5	\$-500
(iv) Ending Inventory	100	\$4	\$400
(v) Change in Book Value			0

Inventory Valuation Adjustment (0-100) = -\$100(Line B. (v) - A. (v))

497. It may be noted that in this example there is no difference in the number of physical units at the beginning and end of the period. In (A) above, however, the book value is higher at the end of the period by \$100 as a result of writing in purchases at a higher price than withdrawals are charged. Since in the above example there is no physical

change, for National Accounts purposes there can be no additional investment in inventories and the change in "reported" book values as in (A) is adjusted downward by \$100. Profits are adjusted by the same amount.

- 498. The valuation adjustment is shown explicitly on the income side, as a positive or negative entry. On the expenditure side, the change in inventories is shown net of the inventory valuation adjustment and is called the "value of physical change in inventories."
- 499. Inventory accounting by the individual business firm is complex, but for the National Accounts estimates there are further difficulties because of the lack of relevant detail and the needs of aggregation. Significant assumptions must be made concerning business accounting methods in use, the commodity composition of stocks and the relevance of available prices. Moreover, it may be recalled that investment in inventories for national accounting purposes is the change in the level of stocks over the period, and that fairly small errors in estimating book values or carrying through the necessary adjustments can lead to relatively large errors in the estimates of changes in inventory. Although there is no precise way to measure the degree of error introduced, experience indicates that the process of aggregation tends to result in the cancellation of some of the errors of estimate. It may be that certain of the others are constant through time so that they have little effect on value of physical change estimates.
- 500. The estimating procedure to derive the current value of physical change and the appropriate valuation adjustment is at present carried out separately for each of about one hundred items or industry groups. The method of carrying through the adjustment for the National Accounts is described at length below. "Flow" data of purchases and sales in physical units and prices, such as are illustrated in the model in paragraph 496 above, are not normally available for use in preparing National Accounts estimates. The adjusting method in use, therefore, begins with book value data estimated from reported book values and related data. Deflator price indexes are applied to these book values (Step (ii) below) to remove the elements of price change from any convenient base period, to derive a measure of the "physical change" in inventories (change in constant dollar book values) for the current period. This "physical change" (Step (iv)) is then revalued with the appropriate average prices of the current period to get the current value of physical change (Steps (v) and (vi) below). The difference between this value of physical change and the change in "reported" book values (Step (i)) is the inventory valuation adjustment required. It may be noted further that the base period actually used (1949) has the advantage of being that used for the constant dollar inventory estimate included in Table

- 5, Gross National Expenditure in Constant (1949) Dollars. The steps in this procedure are outlined below:
  - (i) Estimate the book value of inventory from reported data.
  - (ii) Establish the deflator price index relevant to the period of acquisition of stocks, (taking into account turnover period and predominant business accounting practices).
  - (iii) Calculate the constant dollar book value ((i) ÷ (ii)).
  - (iv) Calculate the year to year change in constant dollar book value (from (iii)).
  - (v) Establish the revaluer price index (based on average prices during the current period).
  - (vi) Calculate the value of physical change in current dollars ((iv) x (v))
  - (vii) Enter the year to year change in reported book values from (i).
  - (viii) Calculate the inventory valuation adjustment ((vi) - (vii)).
- 501. The first of these steps is the estimation of the book values of inventories. This is done in considerable detail for wholesale and retail trade and for manufacturing where stocks are identified as raw materials, goods in process and finished goods. The estimating procedures have been described in the earlier section.
- 502. Establishing the deflator involves a choice of price indices with which to convert the current dollar book value of inventories to a constant dollar book value. The price indices are selected in relation to the assumed commodity content of the inventory, and in cases in which a composite index is required, weighted according to the make-up of the inventory. In both manufacturing and wholesale trade, component parts of the wholesale price index compiled by the Labour and Prices Division of the Dominion Bureau of Statistics are widely used. In general, for retail trade, component parts of the consumer price index are used, and in the remaining industries, wholesale price series.
- 503. The selected price series are then considered in the light of the business accounting methods assumed to be relevant. To date, no adjustments are made for various elements of cost (e.g., overhead costs) included either in the book values or in the price series used for deflation. Allowance is made, however, for the costing procedure assumed to be used to charge goods out of inventory. Some of the principal accounting methods for establishing the value of goods held in stock are outlined below.
- 504. The FIFO (first in first out) method of inventory accounting assumes for costing purposes that the goods are charged to production or sales in the order of their acquisition. When prices are changing, therefore, a physical unit of stock is charged out at a different price than that at which its replacement is acquired, with the result that a change occurs in valuation with no change in the number of physical units. It is implicit in this valuation

procedure that the book value at the end of the period will differ from that appropriate to the National Accounts and an inventory valuation adjustment is in order.

- 505. The LIFO (last in first out) method of inventory valuation charges out first the goods last acquired. As long as stocks are increasing this method will lead to a valuation consistent with national accounting requirements and no inventory valuation adjustment is assumed to be necessary. However, as LIFO is not an acceptable method of inventory valuation for caxation purposes in Canada and because very few of the firms surveyed in 1948 indicated that it was used for carrying an inventory value on their books, this method at present is disregarded in the National Accounts estimating procedures
- 506. The average cost method allows for recalculation of the cost of goods through time so that goods charged out to sales on production will reflect in part most recent prices. There are different techniques by which this cost may be determined, but the effect is to establish a cost for goods consumed somewhere between the original cost of a FIFO method and the replacement cost of LIFO, so that an inventory adjustment is again necessary.
- 507. The lower of cost or market method of valuation may be used with any of the above accounting methods and is frequently used in conjunction with the FIFO method. The inventory book value is written down if current market prices are lower than cost prices established in the conventional manner. Even when market price is used to value inventories, an inventory valuation adjustment may be necessary since the market price at the end of the period may differ from the average price of the period relevant to National Accounts estimates.
- **508.** In preparing the National Accounts estimates, while the concepts and the nature of the adjustments are clear, the extent to which they are relevant and should be applied to existing book value estimates is only approximately determinable from available information. Considerable generalization therefore must be resorted to concerning the method of valuation in use and the appropriate adjustments to carry through.
- 509. It is implied in paragraph 500, step two, that the price index used to deflate inventory book values is in many cases an average of prices over several months. The period of time over which prices are to be averaged is based in part on the turnover period of inventories. Some adjustment to this turnover period is necessary for certain non-FIFO accounting methods. The turnover period generally, is calculated by dividing the year-end book value of inventories by the cost of goods purchased for raw material inventories, and by the sales of the period for finished goods and trade inventories, and multiplying this rate by 12 to express it in months. The relevant data for these

- calculations, for the most part, are available in census of industry reports or from estimates prepared from sample surveys. There are certain assumptions and shortcomings in this procedure, which result principally from statistical inadequacies, but experimentation indicates that in most circumstances fairly large modifications in the periods would not greatly affect the results.
- 510. For inventories valued on a FIFO cost basis the turnover period is directly appropriate as the relevant period for deflation. Some lengthening of the period over which prices are to be averaged is appropriate for certain other accounting methods (e.g., average costs), in which prices in prior periods will continue to have an effect on book values of the current period.
- 511. Wherever inventories are carried at the lower of cost or market price, the cost price determined by one of the above methods is compared with the current market price. The lower of these is assumed to have been used by firms to value inventories and is therefore used in the deflation procedure. The current market price referred to here is the price quotation for the month of December. For certain price quotations which are inclusive of sales taxes, an adjustment is made to eliminate the effect of sales taxes.
- 512. The deflator price index derived from this procedure is divided into the current book value to derive a constant dollar book value series (step three), considered to be representative of the level of physical stocks. The year-to-year changes in this constant dollar series (step four) are, in effect, a measure of physical change.
- 513. The fifth step involves the computation of a price index with which to revalue the physical change derived in the preceding step, to produce a value of physical change expressed in an appropriate current dollar valuation. This step is merely the calculation of the current annual or quarterly average of the same monthly price indices which were used in arriving at the deflator. The difference between the deflator described in step two and the revaluer described above is one only of the time period involved. This average of the current period price index is then used to revalue the "physical change", (change in constant dollar book values).
- 514. The derivation of the inventory valuation is the final step and is obtained by deducting the change in book value (estimated from reported book value data and entered in step seven) from the value of physical change calculated in step six.
- 515. It must be stressed that the summary given in the above paragraphs should not be construed as being in any sense a final or rigid treatment of the subject; new and improved methods are constantly being sought in this field. The estimates of the value of physical change in inventories are subject to a relatively wider margin of error than most of the other National Accounts aggregates.

Exports of Goods and Services less Imports of Goods and Services

516. Because a part of Canada's current production of goods and services is sold to non-residents, it is necessary to add the value of exports to arrive at a final accounting of current production through sales. Conversely, because sales to persons, governments, business on capital account and non-esidents, include goods and services produced by non-residents, i.e. imports, it is necessary to subtract these in order to arrive at a correct valuation of Canadian output.

517. It should be noted that the terms "exports" and "imports" are used here in the broad sense and do not refer to goods and services alone; interest and dividends received from non-residents are included with the "export" series, while interest and dividends paid to non-residents are included with "import" series. It will be recalled that adjustments corresponding to these interest and dividend transactions are made to investment income on the income side of the National Accounts. In addition, gold production available for export, travel expenditures of non-residents in Canada, and freight and shipping credits earned on Canadian account, are included in the "export" figure; travel expenditures of Canadians abroad and freight and shipping charges incurred by Canada on foreign account are included with the "import" series.

518. The figures appearing in the National Accounts are the gross credits and debits on international current account published by the Balance of Payments Section of the Bureau, adjusted to conform to national accounting concepts. For current years, inheritances and emigrants' funds are deducted from gross debits (imports), and inheritances and immigrants' funds are deducted from gross credits (exports). These items do not correspond to payments for goods and services, nor are they related to the current earnings of Canadian or foreign factors of production; they are treated as transfers of capital, which are not included in National Income. (although they occur with sufficient regularity to be considered as "current" transactions for balance of payments purposes). Special exports (and corresponding debit offsets) to NATO countries are also excluded.

519. In the earlier years, particularly the war years, additional special adjustments are made to the basic data. Mutual aid, UNRRA and military relief, are subtracted from the "gross credits" figure and included under government expenditure on goods and services. Since the "exports" involved are financed by the government, this method of presentation is believed to be more appropriate. In addition, investment outlay by the United States Government in Canada in connection with the Alaska Highway and the Northern Staging Routes is deducted from the "gross credits" figure since, as has been noted, these amounts are included in business gross fixed capital formation. In the year 1947, certain credits arising from inter-allied settlement of war

accounts are also excluded since they do not correspond to physical exports of goods and services during that year.

520. Beginning with the year 1940, Newfoundland is treated as a part of Canada in the Canadian balance of international payments. Since Newfoundland did not, in fact, become a part of Canada until 1949, it is necessary, for National Accounts purposes, to correct for this factor for the period before 1949. Entries reflecting Newfoundland's transactions with other countries are therefore deducted from the appropriate items in the Canadian balance of international payments, and entries reflecting Canada's transactions with Newfoundland are added.

521. For a detailed description of the sources and methods used by the Balance of Payments Section of the Bureau, reference should be made to The Canadian Balance of International Payments, 1926 to 1948 and The Canadian Balance of International Payments in the Post-War Years, 1946-1952, Dominion Bureau of Statistics.

#### Residual Error of Estimate

522. The final estimate of Gross National Product is the average of the totals obtained by adding together the unadjusted components of Gross National Product and Gross National Expenditure, respectively. Consequently, one-half of the difference between the independently calculated aggregates appears as an addition to the smaller aggregate, and as a deduction from the larger aggregate, in Tables 1 and 2 and in several of the tables in Section A2, Part I. All measurements are, of course, subject to some 'error'. The discrepancy between the conceptually equal totals reflects imperfections in the basic data or in the estimation methods and may be expected to become relatively lower as the sources and methods are improved.

523. The averaging process described above is considered to be preferable to showing the entire amount of the discrepancy on one side. Rough appraisals of the relative accuracy of the product and expenditure sides of the Accounts suggest that they have approximately equal reliability, and thus they may be given equal weights in the average. In addition, the relative size of the error can be more fairly stated in relation to Gross National Product by a series which is equal to one-half of the difference between the raw totals. This is because the aggregate which may be considered to generate the residual error is considerably larger than the Gross National Product itself. The error-generating aggregate is obtained by summing the components of Gross National Product and Gross National Expenditure without regard to arithmetical sign, and then deducting elements common to both totals such as the imputed items. Since both Gross National Product and Gross National Expenditure contain very large negative entries, e.g., imports and farm operating expenses, the absolute sum of the components is substantially larger than the Gross National Product itself. Consequently, by comparing one-half of the basic discrepancy with the Gross National Product, roughly the same result is obtained as if the whole of the discrepancy were compared with the larger aggregate described above.

**524.** A number of further points may be noted in connection with the residual error. The first is that a small residual error is not conclusive evidence that all components are free from error since there will be some tendency for errors to cancel out in the summation process. Secondly, for most of the period covered by the estimates, the residual error tends to be positive on the product side, suggesting a form of "bias" in the estimates, as opposed to "random"

error. Such a bias is not unexpected since traditionally incomes, the main component of the product side, tend to be understated or under-reported rather than overstated, while on the expenditure side one of the chief problems has always been the avoidance of duplication in summing components of final expenditure. Finally, the residual error may be fairly significant when considered in relation to year-toyear changes in Gross National Product and caution should be used in interpreting minor increases or decreases in the aggregates, especially if the residual error changes its sign. Discrepancies in the timing of specific economic transactions will be reflected in the residual error and such timing differences may become more significant in periods when the Gross National Product levels out following a period of rise or decline.

#### NOTE ON SPECIAL CORPORATION SAMPLE STUDY

- **525.** Beginning with the year 1946, the Department of National Revenue publishes annually *Taxation Statistics*. This publication covers both corporation data and individual data, although only the corporation statistics will be discussed here.
- 526. Information is recorded directly from corporation income tax returns as they are received by the Department. Detailed tabulations of revenues, charges, and balance sheet items are made for corporations submitting income tax returns. Only profits (taxable income) and taxes are recorded for banks and insurance companies since full information on these companies is available from other published sources. Where companies have not filed complete information by the deadline for the publication only their profits and taxes are shown. A careful check is made to ensure that all large companies are included in the figures, and it is believed that understatement of results due to omission of companies is well under one percent. The data are recorded from income tax returns before assessment.
- 527. The first year covered by Taxation Statistics is 1944. Financial corporation statistics for the period 1926-1944 were made the subject of a comprehensive sample study in the Department of National Revenue. The list of corporations included in Taxation Statistics served as the universe for purposes of selecting a sample.
- **528.** The universe was divided into twenty-three industrial groups, with nine of these groups in manufacturing, eight in finance, and the other six in mining, construction, public utilities, wholesale trade, retail trade, and services. The agriculture, fishing and forestry groups were not covered since they are not significant in size relative to the other industrial groups. Banks and insurance companies were not covered in this sample, complete information on their transactions being available from published sources as indicated above.

- 529. A list was made of the corporations in each of these industrial groups, with the companies in each list being arranged in order of size of sales. The largest companies in each list were selected and included in the sample. Smaller companies were picked from the remaining companies in the list, with the chance of selection being proportional to the size of the company. By this method of selection it was possible to get efficient results with a relatively small number of firms. The completed sample covers about 1,000 companies, plus subsidiaries included in consolidated returns.
- **530.** Approximately the same items were recorded for these sample companies as are tabulated in  $Taxation\ Statistics$ .
- 531. An effort was made to ensure comparability of the data for the entire period. If a company filed consolidated returns for some years and not for others, all companies included in the consolidation were included for all years, so that the data are not affected by bookkeeping changes. Consolidated returns, however, brought up problems where the companies entering into the consolidation were not classified in the same industrial group. It was necessary to classify the companies in the industrial group in which the largest percentage of sales were made, and therefore some industrial groups include profits, for example, which might more properly be allocated to other groups.
- 532. Since the fiscal years of corporations may end at any time during the calendar year, it was decided to record companies on a "tabulation year" basis. That is, all companies whose fiscal years ended between July 1 of one year and June 30 of the following year were classified in the same calendar year. The purpose of this was to ensure that at least six months of a company's operations would fall into the calendar year in which it was classified. For example, a company whose fiscal year ended August 31, 1940, would have eight months of its operations

in 1940, and a company whose fiscal year ended on May 31, 1941, would have seven months of its operations in 1940. Both of these companies would be classified in the year 1940. Since a majority of corporations have fiscal years ending December 31, corresponding exactly with the calendar year, the error in the results due to this method of tabulation is probably not large.

- 533. Once the sample companies had been recorded in the Department of National Revenue, the next problem was to arrive at results which would approximate the total of all corporations. This was done by comparing the sales of companies in the sample for the year 1946 with the sales of all corporations for the same year, separately for each industry group, and by groups related to the size of the company. Since large corporations in each industry were recorded completely, no adjustment was necessary for these companies. For the secondlargest size group it might be found, for example, that the companies covered in the sample had onehalf the sales of all companies in that group. The results for this group were then multiplied by two to arrive at an approximation of the total for all companies in the group. The same procedure was carried out for other size groups, and these inflated totals for all size groups were then added together to give totals for the industry.
- 534. Once these industry totals had been obtained they were examined carefully for errors, and to assess the value of the data. The accuracy of the results obtained varied with the item recorded, and with the industry group. The primary purpose of the sample was to obtain good estimates of profits, and since the sample was specially designed for this purpose, the results for this item are considered generally good.
- 535. Items like sales, profits, and dividends paid, which are reported by a large number of companies

each year, are considered to be quite accurate. An example of an item for which results are not very satisfactory is mortgage interest paid. Since only a relatively small number of corporations have mortgage debt, too few corporations reported this item to yield accurate results for industrial groups. However, estimates for all corporations combined should be fairly accurate.

- 536. For the early years, however, results are not as accurate as those for later years due to the method which had to be used to select the sample. For all groups except manufacturing, companies were picked from a list of all corporations existing in 1946. This means that companies which existed sometime during the period 1926-1945, but were not in existence in 1946, had no opportunity of being selected, so that the estimates of the various items would be too low for these early years. Various sources of information, such as census figures of retail and wholesale sales, were used to estimate the resulting undercoverage, and to make necessary adjustments.
- 537. Fortunately, it was possible to obtain a list of manufacturing corporations in existence in 1926 and to use it in selecting the sample for manufacturing, so that this group, which accounts for more than half of the profits of all corporations, needed no adjustment.
- 538. The results of the corporation sample are used extensively in this publication. The industrial breakdown of Gross Domestic Product for the years 1926-1944 is based on sample figures of profits, depletion, bond interest paid and received, and other items. The analysis of corporation profits and their disposition, for the years 1926-1944, is also based on the sample. The sample has made possible the inclusion of estimates of bad debts, and has improved the reliability of estimates of business gross capital formation.

#### Section B

# NOTES ON INDUSTRIAL DISTRIBUTION OF GROSS DOMESTIC PRODUCT

- 539. The concepts underlying the distribution of Gross Domestic Product at factor cost by industry and the basis of this classification are described in Section D of Part II. The present section merely provides a description of sources and methods of the industrial distribution of Gross Domestic Product which has not already been covered in previous sections.
- **540.** The industrial distribution of gross domestic product and its main components are shown in Tables 21 to 24. It should be borne in mind that not all components of Gross Domestic Product are shown separately and therefore these tables by industry, are not additive.
- 541. Since such components as: wages, salaries, and supplementary labour income; net income of unincorporated business; capital consumption allowances and miscellaneous valuation adjustments, and the inventory valuation adjustment are primarily estimated by industry, the sources and methods of estimating the above components have been covered in Section A of this part.
- 542. The only component of Gross Domestic Product which is not necessarily estimated on an industry basis is investment income. The following paragraphs describe the sources and methods employed to distribute investment income industrially.

- 543. Corporation Profits Before Taxes. The methods and sources of estimating corporation profits before taxes are identical with those already described in Section A, the information being available on an industry basis. The main industrial groups in Taxation Statistics conform generally to the Standard Industrial Classification.
- 544. Net bond interest paid, i.e., total bond interest paid by all industrial groups minus total bond interest received by such groups, including bond interest received from non-residents, is distributed industrially on the basis of information obtained from: Taxation Statistics, the special corporation sample study, reports of the Superintendent of Insurance for Canada, information supplied by the Balance of Payments Section, and the Public Accounts and other reports of the federal and provincial governments. The resulting series is adjusted by excluding interest on the public debt.
- 545. The industrial distribution of interest on bank loans is based on information supplied by the Bank of Canada. Deposit interest paid by banks and the

- valuation of banking services to depositors for which there is no specific charge are included in finance, insurance and real estate.
- 546. Interest paid on farm mortgages is included in agriculture. Almost all other mortgage interest is paid by persons on residential property. This interest is mostly included in finance, insurance, and real estate, as all persons paying such interest are considered to be paying it in their capacity as real estate operators rather than as persons. Interest received by business and government agencies is deducted from the appropriate industrial group.
- 547. Dividends received from non-residents are excluded industrially on the basis of information obtained from *Taxation Statistics*, the special corporation sample study, and information supplied by the Balance of Payments Section.
- 548. Profits of government business enterprises are included in their appropriate industrial category. Imputed rent on government-owned buildings is classified to the service industry (see paragraph 188).

#### Section C

#### NOTES ON GEOGRAPHICAL DISTRIBUTION OF PERSONAL INCOMF

- 549. This section outlines the methods used to distribute the various components of personal income by provinces. The following components are published separately: wages, salaries, and supplementary labour income (Table 31), net income received by farm operators from farm production (Table 32), net income of non-farm unincorporated business (Table 33), interest, dividends, and net rental income of persons (Table 34), and transfer payments from governments (Table 35). The following components are included in the total provincial personal income estimates (Table 28) but are not published separately: employer and employee contributions to social insurance and government pension funds, military pay and allowances, and charitable contributions from corporations. The concept of personal income is discussed in paragraphs 127-130.
- (a) Wages, Salaries, and Supplementary Labour Income
- 550. For the years 1948 to 1956, approximately 70 per cent of aggregate wages and salaries are estimated provincially from annual survey data collected by the Dominion Bureau of Statistics; industries surveyed annually include forestry, fishing, hunting, trapping, mining, manufacturing, construction, public utilities, some of the transportation and communication industries and some of the service industries. Another 10 per cent are based on the distribution of payrolls reported monthly to D.B.S.; in this group are air, rail, and water transportation, warehousing, and finance, insurance and real estate.

- The remaining 20 per cent are allocated according to data collected in the 1951 decennial census of Canada.
- 551. Where possible, these methods of estimation are also used for the period 1938 to 1947 inclusive; however, survey and payroll data are not available for some industries in these earlier years and in these cases the allocation is made on the basis of employment reported.
- 552. Estimates for the years 1926 to 1937 are obtained by interpolation using 1921 and 1931 decennial census data and 1938 statistics obtained from the sources outlined above.
- (b) Employer and Employee Contributions to Social Insurance and Government Pension Funds
- 553. For 1951 and earlier years the federal government employer and employee contributions to pension funds are distributed on the basis of the number of civil servants employed in each province in March, 1951. For 1952 the distribution used is the number employed by provinces in March, 1952; for the years 1953 to 1956 inclusive the distribution is based on the aggregate wages and salaries paid provincially to classified federal government employees in December of each of these years.
- 554. Employer and employee contributions to the unemployment insurance fund are allocated on the basis of the insured population as of April 1 of each year.

- 555. Employer and employee contributions to provincial and government pension funds, workmen's compensation and industrial vacation plans are obtained from provincial public accounts.
- **556.** Payments into municipal pension plans are distributed on the basis of data for the year 1948 obtained from a special study of municipal pension plans.

#### (c) Military Pay and Allowances

557. For the years 1926 to 1939 inclusive military pay and allowances are allocated provincially on the basis of the distribution of military pay and allowances for the year 1940 as set out in the report of the Rowell-Sirois Commission. For the years 1940 to 1945 navy and air force pay and allowances are distributed by provincial enlistment figures; for the years 1946 to date annual data on navy and air force pay by provinces have been supplied by the Department of National Defence, and provincial army pay and allowances for the years 1940 to 1956 are also obtained from the Department of National Defence.

# (d) Net Income Received by Farm Operators from Farm Production

558. Provincial data on cash farm income, income in kind, and farm expenses, are estimated annually for each province by the Agriculture Division of the Bureau. These data are adjusted to agree with National Accounts concepts to yield a provincial classification of net income received by farm operators from farm production.

#### (e) Net Income of Non-Farm Unincorporated Business

- 559. Provincial distributions of net incomes in non-farm unincorporated business are made separately for each industry. For fishing and trapping, synthetic operating accounts are constructed from data available within the Bureau. Expenses are deducted from gross revenue to yield net income.
- 560. Beginning with 1946, data on net business income from *Taxation Statistics* are used to distribute provincially net incomes in construction, transportation, wholesale trade, and finance, insurance and real estate. Prior to 1946, the distribution in these industries is based on information from decennial censuses and the Rowell-Sirois Commission report for the period 1926-1937.
- 561. Decennial census data in conjunction with surveys, are used for the provincial distribution of net incomes of certain professional groups, while for the remaining industries; such as retail trade and manufacturing, estimates are based on information on sales and production data derived from annual census of industry data, income tax data, and operating results surveys.

# (f) Interest, Dividends, and Net Rental Income of Persons

562. Deposit Interest and Imputed Interest: deposit interest and imputed interest paid by financial in-

- stitutions are distributed by the value of cheques cashed against individual accounts for the years 1926 to 1941 and by cheques cashed against individual savings accounts from 1942 to 1956.
- 563. Mortgage Interest Received by Persons: the provincial distribution of mortgage interest received by persons as reported annually in *Taxation Statistics* is used to distribute mortgage interest by provinces for the years 1946 to 1956. From 1938 to 1945 it is assumed that the distribution of private mortgage holdings by provinces changed in the same way as the relative distribution of holdings of mortgages by insurance and trust companies. From 1926 to 1937 the distribution is assumed to be the same as that obtaining in 1938.
- 564. Dividends and Bond Interest: from 1946 to 1956 these items are distributed provincially on information contained in *Taxation Statistics*. From 1926 to 1940 these items are allocated provincially on the basis of the Rowell-Sirois Commission report, and interpolations are employed from 1941 to 1945.
- 565. Interest on Government Annuities, Investment Income of Life Insurance Companies and Fraternal Societies: for the years 1936 to 1956 these items are distributed on the basis of the amount of insurance in force by province, as reported in the reports of the Superintendent of Insurance. The percentage distribution for earlier years is assumed to be the same as that for 1936.
- 566. Net Rents Received by Persons: net farm rents received by persons are obtained from the Agriculture Division of the Dominion Bureau of Statistics. From 1926 to 1937 net non-farm rents are distributed on the basis of Rowell-Sirois data. From 1938 to 1956 gross non-farm residential rents are obtained by multiplying the number of dwellings in each province by the average rent per dwelling. The Canada average ratio of net rents to gross rents is used to arrive at net rents. Net non-farm non-residential rents received by persons are based on information published in *Taxation Statistics*.
- 567. Other: the remaining items of this component are pro-rated on the basis of the distribution of the total of the above items.

#### (g) Government Transfer Payments

- 568. Most federal transfer payments are distributed by provinces on the basis of the records of the various federal departments and agencies administering these payments, such as the Departments of National Health and Welfare, Finance, Veterans Affairs, and the Unemployment Insurance Commission.
- 569. Information on provincial government transfer payments is obtained from provincial public accounts. Municipal transfer payments (direct relief,

pensions to government employees and grants to private non-commercial institutions) are distributed in the same proportion as the corresponding provincial government payments of these items

### (h) Charitable Contributions from Corporations

**570.** These are distributed on the basis of the populations of the various provinces.

### (i) Direct Taxes by Provinces

571. Federal income taxes for the years 1926 to 1945 are allocated by individual income tax collections by provinces. From 1946 to 1956 the allocations are based on the tax payable reported on income tax returns filed by province.

**572.** Federal succession duties are allocated by succession duty collections by province.

**573.** Miscellaneous federal direct taxes are allocated on the distribution of income and succession duties by provinces.

**574.** Provincial direct taxes are obtained from provincial public accounts.

575. Municipal income taxes are distributed on the basis of provincial estimates for selected years made by the Rowell-Sirois Commission and by the Dominion-Provincial Conference on Reconstruction. Miscellaneous municipal taxes are distributed on the provincial distribution of poll tax collections.

### Section D

# NOTES ON DETAIL OF PERSONAL EXPENDITURE ON CONSUMER GOODS AND SERVICES

### (a) Commodity Classification of Goods

576. As described earlier, personal expenditures on services are estimated separately for each component listed below. However, in the case of goods the total only is estimated in the first instance. In order to obtain a classification of personal expenditure on goods and services by type, it is necessary to classify the total "goods" estimate by commodity groups. Estimates of individual commodities included in the total are based on the commodity classification of retail sales prepared in connection with the censuses of merchandising in 1930, 1941, and 1951. All of the adjustments to retail sales indicated previously in the description of the estimates of "total goods" are also applicable in preparing estimates of individual commodities.

577. For other years, estimates are obtained by applying indexes to the basic census year estimates. A variety of data are used in constructing these indexes including related store-type sales series, department store sales classified by departments, production, imports and exports, and excise tax data. About 95 per cent of the total is ascribed to specific commodity groups by these procedures.

### (b) Description of Content of Classification

578. The following table shows the content of each of the main groups. The category durable goods as shown in the table is further classified into major durable goods and miscellaneous durable goods. The major durable goods category includes house trailers, new automobiles, net expenditure on used automobiles, home furnishings, furniture, appliances (including stoves and ranges, washing machines, etc.), and radios and television sets. The miscellaneous durable goods category includes jewellery, watches, clocks, silverware, toys, sporting and wheel goods, and household tools and garden equipment.

579. The service component includes all of the items marked (s) in the following table.

580. Non-durable goods comprise the balance of the total.

### 581. Group I - Food<sup>76</sup>

Purchased at retail, for off-premise consumption Meals 77 (including board at university residences) Income in kind:

Farm-consumed farm produce
Armed forces issue
Food component of living allowances to nonagricultural workers

# 582. Group II - Tobacco and Alcoholic Beverages

Tobacco products (including cigarette papers) Alcoholic beverages 77

# 583. Group III — Clothing and Personal Furnishings

Men's and boys' clothing
Women's and children's clothing
Footwear
Piece goods
Notions and smallwares
Armed forces issue
Jewellery and watches
Dressmaking and tailoring (s)
Laundering (s)
Dry cleaning, pressing, and repair (s)
Shoe cleaning and repair (s)
Jewellery and watch repair (s)

76. Including non-alcoholic beverages and confectionery

<sup>77.</sup> Excludes the service portion or cost of serving food and alcoholic beverages for on-premise consumption.

### 584. Group IV - Shelter 78

Gross space rent paid by tenants (s)

Expenses (taxes, insurance, etc.) paid by owneroccupants (s)

Imputed net residential rent and imputed residential capital consumption allowances (s)

Lodging expenses (net) (s)

Imputed lodging - non-residential (s)

Board and lodging in universities (s)

### 585. Group V - Household Operation

Fuel

Electricity (s)

Gas (s)

Telephone (s)

Soap and cleaning supplies

Household supplies n.e.s.

Home furnishings

Furniture

Appliances, radios and television sets

Hardware, plumbing equipment

Garden tools and equipment

Domestic service (s)

Furniture and upholstery repair (s)

Moving expenses (s)

Theft insurance (administrative cost) (s)

Personal property insurance (administrative cost (s)

Water (S)

Janitor service (s)

Furniture and appliances rental (s)

House maintenance repair (s)

### 586. Group VI - Transportation

### (a) User Operated:

House trailers

Automobiles - new

Automobiles - second hand (net purchases)

Gasoline, oil and grease

Automobile repair charges (s)

Automobile insurance (administrative cost) (s)

Bridge, tunnel and ferry tolls (s)

78. Excludes transient shelter which is included in group viii.

### (b) Purchased:

Taxi fares (s)

Railway fares (s)

Electric railway and bus fares (s)

Steamship fares (s)

Plane fares (s)

# 587. Group VII — Personal and Medical Care and Death Expenses

Drugs, cosmetics and toilet preparations

Barber shops and beauty varlors (s)

Medical care (s)

Dental care (s)

Osteopaths and chiropractors, etc. (s)

Private duty nursing (s)

Hospital care (s)

Prepaid medical care (administrative cost) (s)

Accident and sickness insurance (administrative

cost)(s)

Less - compensations (s)

Funeral and burial services (s)

Cemeteries and crematories (s)

### 588. Group VIII - Miscellaneous

Motion picture theatres (s)

Other recreation (s)

Service portion of meals and alcoholic beverages

served for on-premise consumption (s)

Education and instruction (s)

Hotels (s)

Religious and welfare activities (s)

Life insurance (administrative cost) (s)

Stock and bond commissions (s)

Legal services (s)

Consumer credit (administrative cost) (s)

Postage and post office services (s)

Cables and telegrams (s)

Express (s)

Newspapers and magazines

Union dues (administrative cost) (s)

Miscellaneous goods

Local and provincial sales taxes n.e.s.

Miscellaneous services (s)

Net expenditure abroad (s)

### Section E

## CONSTANT DOLLAR ESTIMATES OF GROSS NATIONAL EXPENDITURE

589. A complete analysis of the National Accounts requires statistics that separate volume from price movements. During periods of significantly changing prices the need for data in which price is held constant is particularly apparent. Although such indexes as the consumer price index and the general wholesale price index provide yardsticks for measuring price movements, they do not measure the impact of these changes on the Gross National

Product. For this purpose constant dollar estimates are needed. The constant dollar estimates of Gross National Expenditure published in Table 5 represent the quantities implicit in Table 2 valued in the prices of the base periods rather than in the prices of the current period. These constant dollar estimates are derived through a process called deflation. In this process, each of the main components of Gross National Expenditure is divided by a specially

constructed price index, (see Table 6), to give the corresponding constant dollar estimate. In this way the effect of year-to-year price changes has been removed from the current dollar estimates.

590. In the deflation of Gross National Expenditure two price bases have been employed. The period 1926-1947 has been deflated with price indexes based on the average of 1935-1939 prices. The period 1947-1956 has been deflated with price indexes based on 1949 prices. The two series have been linked together at the year 1947.

591. The constant dollar estimates, used in conjunction with the current dollar estimates, provide valuable information on the impact of price changes on the value of final product. But this is not their only use. Constant dollar estimates, or volume estimates of final product, are needed to provide the data necessary to measure economic growth. Year-to-year changes in the constant dollar estimates constitute a measure of change in real final product and may be expressed in index form.

### The Deflation Process and the Implicit Price Indexes

592. The main object of the deflation process is to produce a volume series in which quantities change from year to year while prices are held constant. Such a series permits the study of year-to-year changes in real Gross National Expenditure as well as in each of its components. To derive such a volume series the value series should be deflated with currently weighted price indexes, that is, indexes whose weights in any given year represent the distribution of expenditures within that year.

593. The first step in the deflation procedure is to obtain a breakdown of the value series in as fine an item detail as possible. For example, personal expenditure is deflated in terms of some seventy items, such as men's and boys' clothing, women's and children's clothing, tobacco, fuel, and so on. The second step is to deflate each item with a price index that has been selected or constructed so that its commodity content and weighting pattern will correspond with that of the value data. Each item so deflated is then expressed in constant dollars. The third step is to sum the detailed items in constant dollars to derive the main aggregates, personal expenditure, government expenditure, and so on. Gross National Expenditure in constant dollar terms is arrived at by this summation process. If the current dollar series are then divided by the constant dollar series at the aggregative level, this process will yield a set of implicit price indexes which are currently weighted.

594. Table 6 shows these implicit price indexes for total Gross National Expenditure and for each of its components other than inventories. The user of the data in this table will ask, how valid are

these indexes for measuring price changes through time? The answer is that year-to-year changes in these price indexes result not only from changes in prices, but also from changes in expenditure patterns. To the extent that expenditure patterns have changed these implicit price indexes are not comparable from year to year, although each one of them is comparable with the base period. If there have been no significant year-to-year shifts in expenditure patterns the implicit price indexes will provide a fair measure of price movements through time. (It should be noted that the line for inventories is omitted from Table 6 because an implicit price index derived from the sum of current and constant dollars which consists of a large number of positive and negative changes is not meaningful, (see paragraphs 641 and 642).)

595. For an example of the effect of these changing patterns refer to Table 6, lines 11 and 12 for the years 1954 and 1955. Line 11, the deflator for the residual error, represents the implicit price index for all components of Gross National Expenditure other than inventories, while line 12 represents the implicit price index for Gross National Expenditure including inventories. The year 1954 was one in which there was a relatively small grain crop with the result that there was disinvestment in farm inventories during that year, while the year 1955 had a large grain crop with a large investment in farm inventories. Farm commodity prices have actually decreased since 1949 in contrast with most other prices which have increased, some substantially. The relatively low price indexes for farm commodities thus have a large weight in the year 1955, and a large weight given to a low price index will tend to lower the level of the aggregate price index of Gross National Expenditure, while a small weight will leave it virtually unchanged, and a negative weight will actually raise it. Largely because of the situation in farm grain in these years, the implicit price index for Gross National Expenditure, line 12, showed virtually no change 1954 to 1955 while that of line 11, which differs from 12 only in that it excludes inventories, increased by 1.5 per cent.

596. The main object of deflation is to produce a volume series which will show year-to-year changes in real final product. The implicit price indexes derived from the deflation process may be contrasted with base weighted price indexes such as the consumer price index whose weights, based on 1947-1948 expenditure patterns, remain fixed for an extended period of time. The following table gives an example of the deflation process and contrasts the implicit or currently weighted clothing price index so derived with a fixed weight price index. Because the relative proportion of men's clothing to total clothing (in constant dollars) decreased from 36 per cent in 1949 to 32 per cent in 1955, the base weighted price index at 104.1 is at a higher level than is the currently weighted implicit price index at 103.7.

597.

# Deflation: Personal Expenditure on Clothing (In 1949 (Constant) Dollars)

-						
No.		1949	1954	1955		
1	Men's and boys' clothing, current dollars (million)	348. 2	411.3	430.3		
2	Price index. 1949 = 100	100.0	112.8	112. 1		
3	(1) ÷ (2) = Men's and boys' clothing, constant dollars (million)	348.2	364. 6	383. 9		
_	Women's and children's clothing, current dollars (million)	630. 5	778. 8	808. 2		
4		100.0	101.8	99.7		
5	Price index, 1949 = 100					
6	(4) ÷ (5) = Women's and children's clothing, constant dollars (million)	630.5	765.0	810. 6		
7	Men's, women's and children's clothing, current dollars (million) (1) + (4)	978. 7	1, 190. 1	1, 238. 5		
8	Men's, women's and children's clothing, constant dollars (million) (3) + (6)	978.7	1,129.6	1, 194. 5		
9	(7) ÷ (8) = Implicit price index, clothing, 1949 = 100	100.0	105. 4	103.7		
	Fixed Weight Price Index, Clothing, 1949 = 100					
1	Men's and boys' clothing, price index, 1949 = 100	100.0	112.8	112.1		
2	(1) x 1949 value: (1949 = 348.2 million)	348.2	392.8	390.3		
3	Women's and children's clothing, price index, 1949 = 100	100.0	101.8	99. 7		
4	(3) x 1949 value: (1949 = 630.5 million)	630.5	641.8	628, 6		
5	(2) + (4) sum of price index x 1949 weight	978.7	1,034.6	1,018.9		
6	(5) $\div$ 1949 value (978.7 million) fixed weight price index, clothing, 1949 = 100	100.0	105. 7	104.1		

#### The Linking Process

598. Most of the time series published in index form have been calculated using more than one time and weight base in their construction, and are, in fact, linked series. These changes in base occur because the weights so employed gradually cease to be appropriate to the current time period. The consumer price index is an excellent example of this. The weights used in its construction are based on family expenditure patterns. These family expenditure weights contain two component parts-the quantities of goods purchased and the prices appropriate to these quantities. Through time, an index such as the consumer price index changes. Because the basket of goods is held constant, these changes in the index, through time, reflect only price movements. However, as the index moves further from the base period, its weighting pattern becomes less representative of current consumption patterns. The proportionate value relationship becomes less representative both because current consumption will include changes in commodity content and will reflect changes in price structure. The change in commodity content may reflect the introduction of new commodities as well as shifting preferences for the existing commodities. For example, the movement of the price index from 1915 to 1920 would be partly determined by the price movements of goods such as the ice-box, while the movement of the price index from 1950 to 1956 would be partly determined by new goods such as electric refrigerators, goods no longer in use being dropped. Moreover, important changes take place in the relative proportion of goods purchased. For example, flour was an important item in the food budget of 1913,

when most of the bread consumed was baked by the housewife, but in the food budget of 1949, bread has replaced flour as the important item.

599. Changes in family expenditures are ascertained periodically and incorporated in the construction of the consumer price index. As the family expenditure patterns of the base period become less representative, it is necessary to calculate a new index, based on the expenditure patterns revealed by more recent family expenditure surveys. The consumer price index, for example, has been calculated in various time segments, each of which has its own time and weight base, - the year 1913 was the base for the period 1913-1925; 1926 for the period 1926-1934; the average of 1935-1939 for the period 1935 to 1948; and 1949 for the period 1949 to 1956. Four series were produced and were linked together at the total level as well as at the published component level to provide a time series from 1913 to 1956, based on 1949 = 100.

600. Gross National Expenditure in constant dollars may be expressed in index form. In this form it is a base weighted volume index, whose weights are the expenditure patterns of the base period. Whereas a base weighted price index is designed to measure changes in price through time, a base weighted volume index is designed to measure changes in quantities through time. Prices are held constant by revaluing current expenditures in the prices of the base period. In this way the effect of price change from the base period on the value of current expenditures is eliminated, and the quantitative changes implicit in the value changes can be isolated and measured.

601. The structure of prices changes through time as a result of changing demand and supply conditions. As the production of new goods is increased their relative price frequently declines. Changing consumer tastes combined with changing consumer incomes and changing production and distribution costs all affect the price relations of the various consumer goods. Similar factors combine to change the price structure of investment goods and of various of the primary products. Because the weights of the constant dollar series are the expenditures of the base period, the price structure of the base period is implicit in the weighting pattern of the constant dollar series. As the index of constant dollar expenditures moves further away from the base period the price structure of the base period becomes less representative of the current period. At some point in time the base period must therefore be revised, and a new price structure, more appropriate to the current period, must be introduced.

**602.** For these reasons the period 1926-1956 has been deflated in two time segments, 1926-1947 and 1947-1956. The first time segment, 1926-1947, was deflated at a fine level of detail with price indexes based on the average of 1935-1939 prices, the

second time segment, 1947-1956, was deflated at a similar level of detail with price indexes based on 1949 prices. The two series were then linked together at the published detail, major component levels, and at the total Gross National Expenditure level by using the relation between the two implicit price indexes at the year of overlap, 1947.

603. As a result of the linking process Gross National Expenditure and its components show identical year-to-year volume movements for the period 1926 to 1947 in the 1935-1939 dollar series and in the series shown in Table 5 which is expressed in 1949 dollars for the years 1926 to 1946. It should be noted that the components linked in this way will not add to Gross National Expenditure which has been independently linked. Residual differences, called adjusting entries, and representing the difference between the sum of the components and the main aggregate, appear at the Gross National Expenditure level as well as at the major component level. These adjusting entries are a function of both the difference in price structure at the link year, and of the difference in final product share in the particular year. An example of the method of linking is given below.

604.

No.		1928	1940	1947
1	Personal expenditure (current dollars)	4, 314	4,488	9, 090
2	Price index 1935-1939 = 100	117.4	106. 4	142. 2
3	Price index 1949 = 100 $\left\{ (3) = \frac{85.3 \times (2)}{142.2} \right\}$ for years 1926-1946	70.4	63.8	85. 3
4	(1) ÷ (2) = 1935-1939 constant dollars	3, 675	4, 218	6,392
5	(1) ÷ (3) = 1949 constant dollars	6, 128	7,034	10,657
6	Index 1935-1939 constant dollars, 1947 = 100	57.5	66.0	100.0
7	Index 1949 constant dollars, 1947 = 100	57. 5	66.0	100.0

605. From the above table it can be seen that the process of linking gives to each of the major components as well as to total Gross National Expenditure the volume movement determined by the 1935-1939 time and weight base deflation. At this point users of the data should be warned against using the data in Table 5 for the years 1926-1946 for real share analysis. The linking process, which enables users to trace growth trends through time, gives rise to difficulties in real product share comparisons. This is a direct result of the varying price ratios at the year of overlap and of the end product shares in the given period, and has little to do with the size of the adjusting entry which may be small due to offsetting factors. For such calculations only the 1935-1939 constant dollar data should be used. The following table compares, for the year 1935 where the adjusting entry was only 2 million, the relative real shares, in terms of 1935-1939 dollars and of 1949 dollars.

606. Percentage Distribution of Final Product for the Year 1935

	1935-1939 (constant dollars)	1949 (constant dollars)			
Personal expenditure	76.8%	75.2%			
Government expenditure	12.5	12.7			
Gross fixed capital formation	8, 6	9.2			
Inventories	1.2	1.4			
Exports	26.9	30.8			
Imports	-23.7	-27.0			
Residual error	- 2.3	- 2.3			
Adjusting entry	-	-			
Total G.N.E.	100.0%	100.0%			

Uses of Gross National Expenditure in Constant Dollars

607. Implicit in the current dollar series are yearto-year changes in both quantities and prices, but if the price factor is held constant, as in the constant dollar series, changes in quantity from year to year and from period to period can then be compared. The constant dollar data are therefore appropriate for answering questions on economic growth such as how rapidly and by how much did the economy expand during the war period? What has been the real growth that has taken place during the post-war period? These questions can be asked of each of the components as well as of the total. The analysis of the growth in real consumer expenditure as compared with the growth in population is particularly useful in helping to answer some of the questions posed by welfare economists.

608. In periods of rapidly changing prices, for example, the immediate post-war years 1947 and 1948 and the post-Korean period 1951, the constant dollar series used in conjunction with the current dollar series can be most helpful in assessing the impact of inflation on the economy. For example from 1947 to 1948 the growth in real terms was 2 per cent as compared with a growth in value terms of 15 per cent. This same type of analysis can be applied to each of the components of Gross National Expenditure.

609. Constant dollar estimates of Gross National Expenditure can also be used in combination with measures of input (such as labour) for the study of productivity, but they (and the input measures) are subject to special limitations in this context. Imperfections which may be unimportant in other contexts may invalidate their use in studies of productivity changes, especially in the short run (from year to year, or within a period of a few years). This is because such studies require great accuracy and a wider range of information than the constant dollar output (and corresponding input) measures can provide.

610. The productivity studies require a rather high degree of accuracy because relatively small errors in the numerator or denominator of a productivity ratio may result in larger errors in the productivity measurement.

611. Productivity studies also require a considerable range of information concerning the relative quantities of various products produced and the relative unit input requirements of the various product types. This is because an apparent productivity ratio is affected by changing patterns of production from year to year. For example, if there were a shift from agriculture into manufacturing, the ratio might go up merely because output per man-hour is higher in manufacturing than in agriculture. This increase in overall output per man-hour could occur without any change in productivity in either sector.

612. With reference to productivity analysis it should be noted that some of the estimates, notably some components of gross fixed capital formation and of government, are made with the implicit assumption that productivity remains constant. A further note of this will appear later (see paragraphs 628 and 651), but it should be understood that this represents one of the defects of the series for use in productivity studies.

613. Because Table 5 represents a linked series, employing two price bases for two segments of time, the table cannot be used for purposes of real share analysis prior to the year 1947. This has been discussed in the note on the linking process.

### Other Methods of Estimating Real Output

614. There are four ways to separate volume from price movements for the National Accounts. Each of these approaches provides an estimate of the change in volume, or real output as it is frequently called, which are, in all important respects, comparable with each other. The first, as has already been explained, is by deflating the components of Gross National Expenditure; the second is by deflating the components of National Income and other components of Gross National Product; the third is by summing the value added by each industry in the economy; the fourth is by tracing goods and services produced by Canadian industries through the economy, deducting goods used in industry to produce other goods and services and deducting imports, to arrive at real final product.

615. In order to measure volume movements, all value figures must be related to physical commodities or services. In deflating the components of Gross National Expenditure no problem was encountered since all the components are marketed goods and services and can be deflated with appropriate price indexes. Deflated Gross National Expenditure therefore readily provides a measure of real output within the economy and traces at the total level economic growth over a time period.

616. When, however, one attempts the second approach, that is, deflating the income side of the Accounts, serious difficulties are encountered. For example, how does one measure real wages and salaries? Until income is spent, it cannot be identified with a commodity or service and deflated - this is the crux of the problem of income deflation. Some large portion of wages and salaries is spent on consumer goods and services but not all income is spent and the problem of deflating the residual remains. Similarly, it is difficult to relate other components of National Income to specific commodities so that they can be deflated. Some parts of investment income, for example, may have been retained by establishments and used to purchase machinery and equipment or to invest in stocks and bonds. Thus, there does not seem to be any solution to the problem of deflating profits.

- 617. An approach frequently used to estimate real wages and salaries or real personal income is to divide either of these components by the consumer price index. This may be a useful device for some comparisons, but it is subject to two important qualifications. In the first place, it assumes that all income is spent; it neglects the saving component. In the second place, it assumes that the expenditure pattern in any year that is deflated is that of the weighting pattern of the consumer price index. This weighting pattern is based on the expenditures of urban families with annual incomes ranging from \$1,650 to \$4,050 during the year ending August 31, 1948. The currently weighted implicit price index for consumer expenditure, with its national weights, would be a better deflator for these aggregates than the consumer price index.
- 618. A third method of estimating real output is the industry approach which consists of summing real value added (including capital consumption allowances) by each industry in the economy. Conceptually, from the volume of production at each stage is subtracted the volume of materials, fuel, electricity and services consumed in the production process. To accomplish this subtraction of volume figures, the physical quantities of commodities produced and of all materials used are measured in each period and are valued at some conveniently chosen base period price. The result is the real value added by the factors of production by industry. At the present time the Bureau publishes an index of the physical volume of industrial production covering the manufacturing, mining, and electricity and gas industries. Work on the extension of this index to cover the entire economy is nearing completion and it is expected that these statistics will be published in the near future. The following industries will then be included: agriculture, forestry, fishing, hunting and trapping, construction, trade, transportation, communication and storage, finance, insurance and real estate, and services. The index will then measure the change in the volume of gross domestic product at factor cost (see footnote to paragraph 73).
- 619. The fourth approach to the measurement of real output requires tracing commodities produced by the various Canadian industries to final expenditure categories. The production of each commodity would be measured in physical volume terms, the use by other industries deducted, care taken that imports were not included, and the amount of final real product so obtained valued at the price of some appropriate base period. This valuation makes it possible to add together the various components of real output and so arrive at a total figure in dollars of the base period. This approach involves in effect a cross-classification of final products by the industries enumerated in the third method and would thus provide a useful check between estimates made by the industry approach and by deflated Gross National Expenditure. As yet, however, this approach has not been developed in Canada.

- Personal Expenditure on Consumer Goods and Services
- 620. This component accounts for about two-thirds of Gross National Expenditure. In general, the quality of its deflation is better than that of any other major component. A relatively large amount of price data is available (Labour and Prices Division, Dominion Bureau of Statistics) for purposes of deflating this component. In many cases price and value data can be matched at a fine level of detail, but in other cases there is either a quantity of price data and a lack of a similar fine breakdown for the value data (e.g., food) or there is a fine level of detail in the value series and a lack of similar information for prices. In most respects these omissions are not serious, but they do indicate the direction in which improvements can be made in the series. Some of the sub-groups and a large number of individual items of the consumer price index have been used in one combination or another to deflate the commodity and service detail. The detail so deflated now consists of approximately seventy individual categories.
- 621. Brief comments will follow on the deflation of some of the more important components. Until 1949 purchased food was deflated with the published food price index. From 1949 on, however, direct household sales of food by dairies and by bakeries, and sales by market produce stalls, have been deflated separately from all other purchased food. (The last-mentioned component is deflated with an adjusted index of food prices). As more value data by commodity become available this component will be deflated at a finer level of detail.
- 622. The clothing components of the consumer price index show separately men's, women's, and children's clothing, while the current dollar data combine men's and boys' clothing, and women's and children's clothing. It has been necessary therefore to construct from available price data suitable price indexes for each of the current dollar components.
- 623. The two items, tobacco and alcoholic beverages, are deflated with combined price indexes for cigarettes and cut tobacco and for beer and liquor respectively. Each of these is weighted (for the year 1949) with weights based on national consumption patterns for that period. It should be noted that where prices of commodities that are included in the value data, such as cigars and wine above, are omitted from the deflator, the reasonable assumption made is that the prices of these minor products move in the same way as do the prices of the more important represented products.
- 624. The 1935-1939 and 1949 based deflated series differ from one another in several respects other than base period. Prices used in the 1949 base deflation are more numerous than those of the 1935-1939 base deflation and account for important new products as well as for price information missing for the earlier period. Examples of the latter are the

inclusion of prices for beer and liquor and for children's wear. In the 1935-1939 base deflation the average value of expenditures on alcoholic beverages was moved through time on a volume index based on the gallonage of alcoholic beverages consumption. Some of the new products priced and included in the 1949 based deflators are electric stoves, vacuum cleaners and electric irons. These are used in combination with other prices to deflate personal expenditure on household appliances and radios.

625. A second difference is that the 1949 based price indexes are constructed with the use of estimated quarterly weights. The changing seasonal weights will result in an annual estimate different from the simple average of the four quarters, and the more pronounced is the seasonal the greater will be the difference. The effect is notable in items such as new cars and fuel.

626. The third difference applies not only to the two series of deflators, 1935-1939 and 1949, but also to the continuing process of deflating through time. As new commodities gain in importance, data must be adjusted to account for these structural changes. Two examples of this are the increased use by consumers of fuel oil and the increase in air travel. Both of these have been notable in the postwar period. As a result, such series as expenditure on fuel, which was formerly deflated with a single price index, is now deflated in terms of its components, one of which is fuel oil. Similarly, the volume of air travel purchased is now estimated directly. This estimate then forms one of the components of transportation purchased.

### Government Expenditure on Goods and Services

627. It is exceedingly difficult to obtain an object breakdown of government expenditure at the three levels of government. For this reason the breakdown is made at the total level and is as follows: federal wages and salaries, provincial and municipal wages and salaries, military pay and allowances, imputed rent on government-owned buildings, public gross fixed capital formation and its components, defence expenditure and a residual.

628. The wage and salary components, in the 1935-1939 base series, were deflated on the basis of a special wage rate index covering selected civil service occupations and the annual number of employed persons in the civil service. In the 1949 base deflation each of the major components is deflated with an implicit price index derived partly from moving 1949 values on a volume index based on the number of employees, and partly from deflating current values with indexes of average hourly earnings appropriate to casual employees. The provincial and municipal constant dollar estimate includes a volume estimate for expenditures of municipal school corporations based on an index of the number of teachers. Military pay and allowances constant dollar estimates are based on an index of the number in the armed forces. During the war period this series was adjusted for changes in the composition of ranks.

629. Imputed rent on government-owned buildings is deflated with the rent component of the consumer price index. Official contributions (UNRRA, Mutual Aid, etc.) were broken down, mainly on the basis of the Canadian Mutual Aid Board Report, into commodity groupings which matched the export classifications, and were deflated by appropriate export price indexes. The deflators for public gross fixed capital formation are described below under gross fixed capital formation.

630. The deflation of government defence expenditure presents a number of difficult problems. In the first place it is difficult to obtain an object breakdown of these expenditures. In the second place, the problem of pricing the commodities within defence expenditure is difficult. Changes in price can be measured readily if the nature of the priced object remains constant. For example, a bushel of number one northern wheat in 1956 is essentially unchanged from another bushel of that commodity in 1945. But commodities such as aircraft are constantly undergoing technological and structural changes so that an aircraft, in 1950, is by no means comparable to another aircraft in 1956. Consequently, changes in the cost of these to the government cannot be regarded wholly as changes in their price. Because of these difficulties the present deflator for defence expenditure combines various material and average hourly earning indexes, with the implicit assumption that these prices move in the same way as do the prices of the final products.

#### **Business Gross Fixed Capital Formation**

631. This group consists of three components; new residential construction, new non-residential construction and new machinery and equipment. Each in its turn is deflated in terms of its sub-components. For a large portion of these estimates final product prices are not available, and special indexes incorporating wage and material data therefore have been constructed. In using these indexes the assumption is made that changes in the prices of wages and materials will correspond with changes in the price of the final product. Unfortunately no profit or productivity adjustments can be ascertained from available data.

632. New residential construction is deflated in terms of four components; new structures non-farm, new structures farm, conversions, major improvements and alterations and supplementary building costs. Each of the first three groups was deflated with an index which combined residential building materials prices and construction wage rates.

633. New non-residential construction was deflated in terms of two components for the 1935-1939 series, and in terms of three components for the 1949 series.

Non-residential construction includes building construction and engineering construction. For the period 1926-1947 each of these components was deflated with cost type price indexes, constructed from data on building material prices and construction wage rates. For the period 1947 to 1956 railway construction is separated from other engineering construction and each of the three components is deflated with an appropriate index based on building material price and wage rate movements.

634. For the period 1926-1947, new machinery and equipment was subdivided into two componentsagricultural and non-agricultural. The second, nonagricultural, was further subdivided into a domestically produced portion and an imported portion. The domestically produced component was deflated with an index combining wage rates and materials. As the largest part of total imports of machinery and equipment is from the United States, the imported portion was deflated with the price index for producers' durable equipment, published by the United States Department of Commerce. This index was adjusted for changes in the exchange rate. import duties, sales and excise taxes and transportation and mark-up costs in order to approximate final Canadian prices. The agricultural component was deflated with the index of farm machinery prices published by the Labour and Prices Division, Dominion Bureau of Statistics.

635. For the period 1947 to 1956, commercial vehicles and passenger cars purchased for business use are separated from the non-agricultural group, and the imported portion of this non-agricultural group is further subdivided into five main types of imported machinery and equipment. Each of these five categories is deflated with an appropriate machinery price index as published by the United States Department of Commerce. In this way, the United States price data are currently weighted with expenditures based on the contents of our imports from that country. Adjustments for changes in the rate of exchange and duty are made to the implicit price at the total level. Passenger cars and commercial vehicles are deflated by appropriate final product price indexes. The method of deflating domestically produced non-agricultural machinery and of agricultural machinery and equipment is unchanged.

### Change in Inventories

636. For purposes of converting the current dollar estimates into a constant dollar series, inventories are separated into two main sectors, (a) farm inventories and grain in commercial channels, and (b) non-farm business inventories. The deflation procedure for these two series differs because of the nature of the basic data.

637. For farm inventories and grain in commercial channels, the constant dollar series is derived by valuing, in prices relevant to the base period chosen, the physical quantities of stocks. Prices,

numbers of poultry and livestock and the amount of grain held in inventory are obtained from the Agriculture Division, Dominion Bureau of Statistics.

638. The procedure for the conversion of non-farm business inventories differs from the above because detail on physical quantities is not available. The information given consists of current dollar book value only, from which it is necessary to remove the effect of price changes relevant to a base period. This is done by the use of index numbers of prices, which when divided into the current dollar data yield an estimate of book value expressed in constant dollars in the base period. The change in constant dollar book values, which is the relevant data for inclusion in the National Accounts, is derived by differencing the year-end constant dollar book values.

639. The selection of price indexes appropriate to the estimated commodity content of inventories is carried out in considerable detail for manufacturing, wholesale and retail trade. Virtually all of the price indexes selected are component parts of the wholesale price index and consumer price index, published by the Labour and Prices Division, Dominion Bureau of Statistics. Although precise information is lacking on the commodity content of inventories, it is possible to build up estimates. For the manufacturing industries this is done from data on the value of materials purchased, industry products and designation, as published in annual reports covering manufacturing by the Industry and Merchandising Division, Dominion Bureau of Statistics. For wholesale and retail trades the estimates are built up from sales by kind of business published in Census of Canada 1951. Volumes VII and VIII, and subsequent annual reports on the merchandising trades.

640. In industries other than manufacturing, wholesale and retail trade, such as forestry, mining, public utilities, construction, transportation and finance and services, the appropriate price indexes are selected after consideration of Dominion Bureau of Statistics publications relating to the industry, trade association reports and annual reports of certain large corporations. The price indexes chosen are then weighted according to the relevant importance of the commodities, assumed from the study of these related series. In many cases, where precise commodity content of inventory is lacking the price indexes used relate to a group of commodities rather than any single commodity. Further adjustments to the price indexes are made, dependent in large part on the assumed accounting methods in use. These are described in paragraphs 503 to 511.

641. An implicit deflator for non-farm business inventories can be derived by dividing the sum of the current dollar book values by the sum of the constant dollar book values. However, the implicit deflator so derived for inventories is not conceptually equivalent to the implicit deflators of the

other Gross National Expenditure components published in Table 6. Each of the indexes published in this table represents a currently weighted price index based on the average of prices for the period. (In the case of Table 6, the period is twelve months). The deflators for inventory book values, however, cover varying time periods, in accordance with assumptions made in regard to turnover periods and accounting methods. Some deflators of inventory book values may include price indexes for the preceding twenty-four months, others for the preceding month only. The deflators for all other components of Gross National Expenditure are based on the average of prices for the time period being deflated, in the case of annual deflation, twelve months, in the case of quarterly deflation, three months. The inventory implicit price index comparable to those published in Table 6, is the revaluer. Each of the changes in constant dollar book values is revalued with a price index based on the average of prices for the deflation period. This process gives the value of the physical change. The implicit revaluer is derived by dividing the sum of the values of physical change by the sum of the changes in constant dollars.

642. The implicit revaluer so derived is a currently weighted average of price indexes, but the weights of the index consist of both positive and negative items. (This is in contrast to the implicit price index for the other expenditure components where the weights are all positive). Where the weights of a weighted average of price indexes are of opposing signs, as is the case with the implicit revaluer, the result will usually lie outside the range of the implicit revaluer for all the positive items and for all the negative items. (There is also the possibility that the revaluer may be either zero or indeterminate). For these reasons, the implicit revaluer cannot be regarded as meaningful, and it is therefore not published in Table 6.

### **Exports and Imports of Goods and Services**

643. Merchandise exports and imports were each deflated by specially constructed, currently weighted price indexes. These indexes were derived from deflating the merchandise data at a fine level of detail with price relatives in a large part derived from data in Trade of Canada. The groupings included in this publication had to be adjusted first in order to construct the price indexes, second to convert the data to definitions used in the National Accounts. For example, official contributions to other governments during the war were deducted from each of the appropriate export groups. (These contributions are included with government expenditure). In the foreign trade sector currently weighted price indexes may differ considerably from base weighted price indexes because of shifts in patterns of trade. For this reason, it was considered especially important to develop currently weighted price indexes to deflate merchandise exports and

644. The deflation of some of the components of the invisible exports and imports presents problems of income deflation, as discussed in paragraph 616. A good example is the deflation of interest and dividends paid to and received from non-residents. In the deflation of these components the assumptions are made that outpayments will be used to purchase Canadian exports while receipts will be used to purchase imports. Therefore, interest and dividend payments are deflated with the implicit price index of exports, while interest and dividend receipts are deflated with the implicit price index of imports.

645. Tourist expenditures are deflated by indexes based on the prices of those goods and services normally purchased by tourists. The prices of Canadian goods are used to deflate tourist expenditures in Canada, while the prices of United States goods (after adjustment for changes in the rate of exchange) are used to deflate tourist expenditures abroad.

646. Other components of the invisible group are deflated with indexes designed either to estimate or to be representative of the price movements of the contents of the value data.

647. A special note should be made of an important difference between current and constant dollars in the foreign trade sector. In the current dollar series the difference between exports and imports is known as the surplus or deficit, the value of net foreign investment or disinvestment of a given year. It is a meaningful entity in that it measures either the extent by which we have increased our claims on other nationals, or the extent by which other nationals have increased their claims on us. Because one of the objects of the deflation of Gross National Expenditure is to obtain a measure of the real output of the economy, it was considered appropriate to deflate exports with indexes of export prices and imports with indexes of import prices. Because of this method of deflation the difference between exports and imports in constant dollars may bear no relationship to the current value surplus or deficit. It is quite possible to have a surplus in the current dollar estimates and a deficit in the constant dollar estimates. Such was the case in 1952, when net foreign investment amounted to \$173 million, while in the constant dollar estimates the difference between exports and imports amounted to -\$32 million.

# Qualitative Assessment of the Constant Dollar Estimates

648. In the deflation process value and price data must be matched at a fine level of detail. There are, of course, many areas in which information is lacking to give either value data in a fine level of detail (e.g., personal expenditure on food), or to give final product price information. In such cases assumptions have to be made about either the content of the value data or the determinants of final product

price movements. Many of the assumptions so made are valid, some are tenuous, but in all cases the resulting estimates are the best available given the limitations of the data.

- 649. While the implicit price indexes are currently weighted at levels at which they appear in the table, it should be noted that at the initial stage in the deflation process price indexes have been employed, which, in many cases, are base weighted; that is, fixed weights have been attached to the price relatives, assuming that the expenditure pattern of the base period held throughout. Reference to the numerical illustration, (see paragraph 597), on the deflation process may further clarify the point. It will be seen that the total of men's clothing in current dollars, which is made up of numerous items of clothing (line 1) is divided by a price index applicable to the total of men's clothing (line 2); this price index is weighted by a fixed pattern of expenditure on men's clothing, the one which prevailed in the base period. So long as the relative quantities of the various items constituting the group men's clothing have changed in the same proportion, it is a matter of indifference whether they are base or currently weighted. However, if changes in the relative quantities purchased within the group take place, and in addition, the relative prices change, there will be a difference in the constant dollar estimates, depending on whether current or base weighted indexes are used. It is for this reason that the deflation was carried out in as much detail as possible; in order to make maximum allowances for changes in the patterns of quantities purchased, or in other words, to bring the results closer to a completely currently weighted price index system.
- **650.** It should be noted that price indexes are constructed on the basis of prices of a sample of items and it is assumed that the prices in the sample have moved in the same manner as prices not covered.
- 651. It has already been noted that several of the components (notably in the gross fixed capital formation component) are deflated with indexes of costs rather than indexes of final product prices. This procedure assumes that the final product prices move with the prices of materials and of labour. It has not yet been possible to take account of either changing profit margins or changing productivity in the construction of these indexes, Work is now under way in the Labour and Prices Division on the construction of machinery and equipment final product price indexes. When this work has been

completed the quality of the deflation of non-agricultural domestically produced machinery and equipment will be greatly improved.

- 652. A further problem concerns the incorporation of quality changes in the constant dollar data. For example, there has been improvement in the quality of a standard automobile over a period of time, some part of which can be attributed to improved technology, and some part to increased size, horsepower, etc. Year-to-year changes in the selling price of this car will reflect not only changes due to price, but also changes due to quality. If the price index for automobiles can be so calculated that it will include only those changes attributable to pure price, then, in the process of deflation, the constant dollar estimates will include increases in value attributable to improved quality. Wherever possible, pricing by the Bureau of Statistics is done by specifications in order that only pure price change will be measured. Where prices are so calculated (e.g., certain items of men's clothing), then quality changes are retained in the constant dollar estimates. In the case of highly manufactured goods, pricing by specification is difficult (e.g., most durable goods), and in these cases quality changes are usually retained in the deflator rather than in the constant dollar estimates.
- 653. The deflation procedure, however, does take into account a special type of quality change which would not normally be reflected in direct measurements of physical production. This quality change results from the fact that groups of commodities, treated statistically as individual products, frequently change in composition. If the proportion of higher quality and more expensive automobiles purchased were higher in 1955, for example, than in 1946, the average quality of the group automobiles may be said to have increased and this would be reflected by a rise in its current dollar value. When this higher value is divided by an index of prices of specified individual autos, the quantity measurement will contain an increase on account of this improvement in group quality.
- 654. Other factors which cannot be allowed for in the construction of price indexes are bargain sales, concealed discounts or premiums. Therefore, if prices are falling more rapidly than indicated by official data, constant dollar estimates will be understated. Conversely, if prices are rising more rapidly than is indicated by official data, constant dollar estimates will be overstated.

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